THE MATERNITY WARD IS DESIGNED FOR MEN.

Manchester School of Architecture
MArch Dissertation
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Abstract

When looking into equality in spaces, it is often hard to compromise on a design that functions for everyone, of every gender. However, the maternity ward is undisputedly a space meant for women to give birth. Therefore this dissertation is an investigation on who the maternity ward is really designed for today, and furthermore linking back our current design on the maternity ward to when we first designed it for men in the 17th century.

This dissertation uses a feminist approach to explore the history of the maternity ward and evaluate the design decisions made, through a literature review. Following this, I analysed and discussed the surveys made for maternity staff and mothers, understanding and comparing their opinions on the current design, as both specialists in the field and the users of the space. This is shown through three chapters, choice, privacy and home comforts. The discussion suggests successes and improvements in the design, and evaluates the introduction of birthing centres as a precedent to contrast to a hospital maternity ward. To conclude, I discussed how the survey results link the maternity ward to being designed for men as well as limitations found in the study, and steps forward for this research to further strengthen this argument.

The findings from this dissertation shows that the development of maternity wards came about as a way for male doctors to experiment on mothers with the advancement of maternity tools such as forceps in the 17th century. Since then, maternity design progressed with the help of Florence Nightgale for disease control of the space however it has not progressed for the support and comfort of mothers as shown by reports in the 1950's. The Yale studies in 1974, based on these designs, highlighted issues which could be seen in comments from the surveys for this study, fifty years later.

The hope for this research is to fill the gap in knowledge that we have in maternity ward design and highlight the need for gender specific spaces in this context.

Acknowledgements

A big thank you to my disseration supervisor, Dr Sam Holden, I am truly grateful for your enthusiatic support and tutoring.

I would like to acknowledge the maternity staff of Manchester for taking part in my survey and for the advice and understanding gained from these reponses. In particular, thank you to Sarah Jones, Lead Midwife for Practice Development and Education, for the communcation and distrubution of the survey throughout the hospitals and birthing centers of Manchester.

A further thank you goes to all the mothers who participated in this study and shared their experiences.

I owe a special thanks to my parents for their support and guidance.

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Introduction

Who is the maternity ward designed for?

Research shows that the way we design in Architecture is primarily for the function of Men (Kern, 2021). This is seem through research on the ergonomics of features such as stairs, door handles, and even temperatures of spaces (BBC, 2015). This in itself is problematic for a society where multiple genders can occupy a space, including hospitals. The medical knowledge on women is already significantly less than that we have on men (Merone et al., 2022), so how does that translate into the spaces used to treat people? For this research I wanted to focus on one space where the purpose of that space should be to function for the needs of women, the maternity ward.

This dissertation will aim to cover the following questions to prove the maternity ward is not designed for mothers, but instead designed for men:

- Why are maternity wards designed the way they are?
- If any changes have been made from the standard hospital ward for the consideration of women in maternity wards
- Ultimately, who is the maternity ward really designed for?

This dissertation will use these aims to critically analyse and raise awareness on how there is a gap in research, or even a reluctancy to admit the inequality of gender specific spaces. This will be shown through the examination of existing literature around the reasoning for the design of the maternity ward. The chapters choice, privacy and home comforts will analysis the survey results sent to maternity staff and mothers, particularly because these are the aspects that were most commonly spoken about in the surveys and therefore most needed to evaluate the success of the maternity ward. To discuss these results, explanations of why these attitudes have occurred and how this links to the existing reading showing that the current design hasn't progressed since the 17th century. To conclude, I will evaluate these findings against an existing precedent which suggests how the design of maternity should look, as well as summarising the next steps for this course of research.

Literature Review

Why are maternity wards designed the way they are?

Introduction:

This literature review will aim to answer how has the history of medicine and hospital design, influenced how the maternity ward is designed today. First this will look at the history of design of hospitals, and the progression from the 17th century to post war records of design. The review will then go on to explore the introduction of the maternity ward, when male influence on the birthing process was introduced and key female figures in the progression of maternity health care.

History of hospitals in UK:

For a long time, the country only had three hospitals, St Mary of Bethlehem, St Bartholomew and St Thomas's (Thompson and Goldin, 1975). Whilst St Mary's specialised as a mental health hospital, St Bartholomew and St Thomas's (image 1) were general hospitals, introducing specialist wards in the 15th century, after they were refunded. The design of the new Bethlehem hospital for disease control in 1675, by scientist Robert Hooke, demonstrated Hooke's awareness of European architectural trends, and introduced new standards for large public buildings in England (Richardson, Goodall, and Royal Commission, 1998). From 1720's, there was an increase of new voluntary hospitals to provide free health care for the poor, while higher class people were able to fund medical assistance in their own homes. Voluntary hospitals were seen as comparable to the treatment received by the wealthy, with large, quiet wards and caring staff (Besant and Hake, 1892).

After the introduction of voluntary hospitals, the planned design of the hospital started to take form. Thomas Guy, governor of St Thomas's Hospital, wanted to establish an institution which wouldn't exclude the incurable and insane (Richardson, Goodall, and Royal Commission, 1998). Echoing the design of St Bartholomew (image 2) and St Thomas's from 400 years before, Thomas Dance prepared a design for this new hospital in 1722. Smaller hospital designs mimicked country houses and domestic villas, whilst maintaining a periodic formality to distinguish these places as a public building. Larger hospitals were designed for variety of use and the flexibility of demand. The ward had no strict rules on size, until late 19th century, as opinions constantly shifted between the benefits of larger vs smaller rooms.

Image 1: St Thomas' Hospital, Vauxhaul History, 2012

Image 2: St Bartholomews Hospital c.1740

Florence Nightingale (image 3)**:**

Image 3: Florence Nightingale, c.1870, perry pictures, 1910

Critical accounts of the conditions of hospitals and the mortality rate appeared in literature from the 18th century. Between 1891-1893, Henry Burdett published volumes of a book which devised a classification system for hospital plans. This portfolio was prepared with the help of Keith Young and Henrey hall, "one of the foremost architectural practices in hospital design" (Richardson, Goodall, and Royal Commission, 1998). This provided guidelines for planning and furnishing hospital design for the benefit of the patients. However, possibly the best-known writer and reformer for hospital design was in fact a woman, Florence Nightingale. After the Crimea War (1853-56)(image 4), and with the help of some powerful friends, she introduced the pavilion plan, which included long rectangular wards, with greater separation, cross ventilated by opposing windows. Kitchens and administration offices were kept separately in other buildings. This design could be seen in the new ward wings added to St Thomas's in 1830s-40s, and heavily pushed in military hospital designs from the 1850's. The new St Thomas's Hospital in 1868, was a significant design, showing both the Pavilion plan (image 5), as well as being seen as aesthetic to hide the sanitary facilities within. The cheap design offered good light and free circulation of air, with the benefit of being easily added to existed hospitals. The pavilion design coincided with the timings of mortality rates going down, so increased the demand for the hospitals. This meant general hospital had to be more exclusive, causing specialist hospitals for others needs to be built and coincidentally, specialist wards within hospitals during the 19th century. Further development of the hospital ward can be seen in image 6, leading to the designs documented in the 1950's.

Image 4: Nightingale in Crimean War Hospital c.1855, Getty 2022

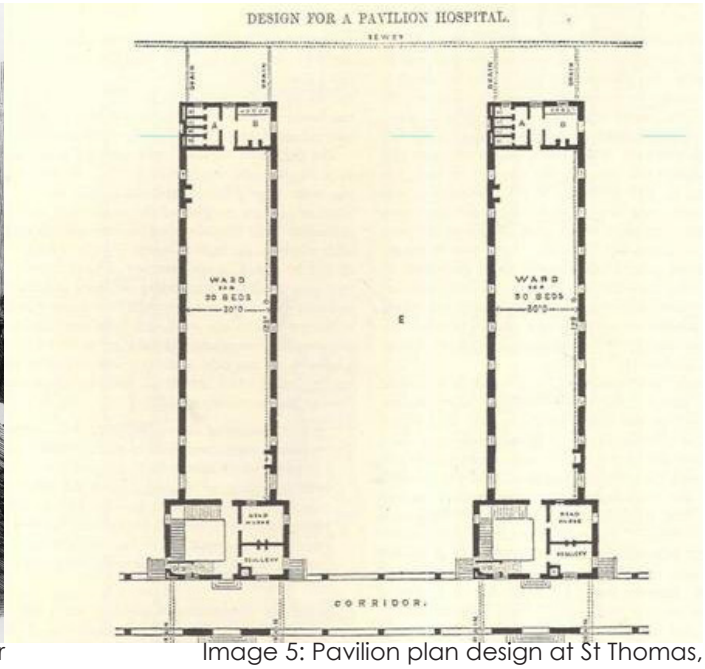


Image 5: Pavilion plan design at St Thomas, Thompson &Goldin 1975

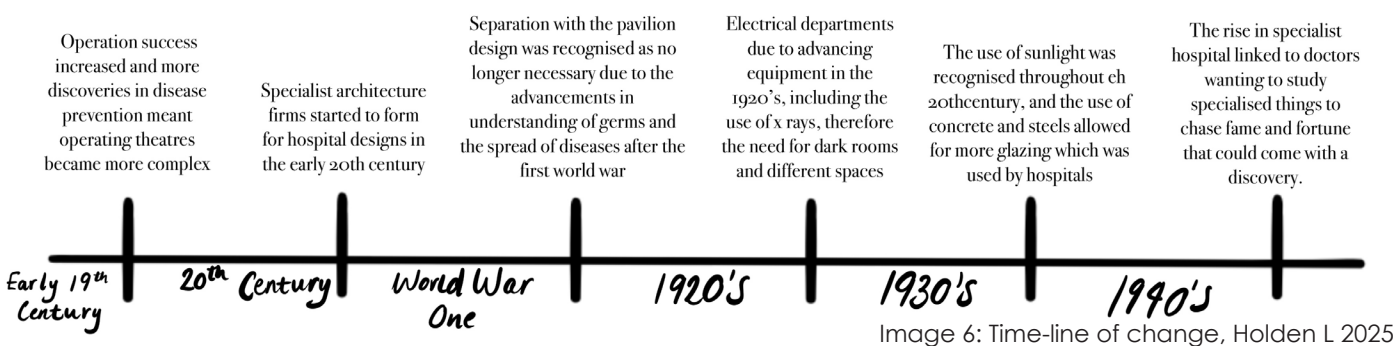


Image 6: Time-line of change, Holden L 2025

The 1950's layout of hospital wards (Aldis, 1954)**:**

These plans are useful to understand, to make comparisons to the maternity ward design. This will help analyse if any changes have been made for women.

The size of the ward unit will be determined by:

- Demand of patient on the nursing staff
- Max number of patients that can be supervised
- Cost and capacity of equipment in the unit
- Building maintenance cost, staffs salaries

A ward unit should be self-contained and not used as a corridor (image 7).

General sick rooms:
Minimum of 95 sq. Ft. First impressions matter. Large units are frightening so a max of 8 beds (image 7) by unit, however preferably no more than 4 beds:

- Reduces effects of infectious disease
- All unit to be for one need and therefore all equipment to stay in one place
- All patients get a corner which helps with the sense of privacy
- Less beds out of action when maintenance occurs
- Lower ceiling heights

However, this is expensive due to more nurses and equipment needed.

Important points to note of the design of a ward:

- Windows should be low enough for patients to see out when lying down. (Image 8)
- Views should not be of the mortuary, or anything connected with it
- Colours, washable wallpapers, washable curtains and decorative floors are encouraged
- Blinds must still allow ventilation when drawn
- If fixed partitions are used, they must be glazed for nursing control
- Protection on walls for movement of the beds
- External angles/ corners to be protected
- No dust-collecting corners
- Patients should always be able to turn their back on the main source of light to avoid uncomfortable glare (note that nurses may prefer the lighting from their work, but it can be uncomfortable for patients)

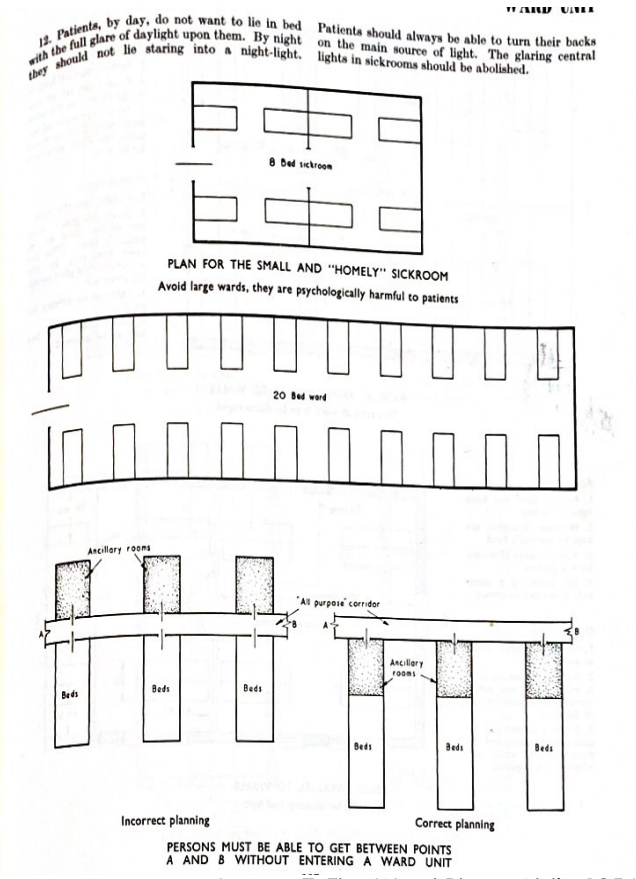


Image 7: The Ward Plans, Aldis, 1954

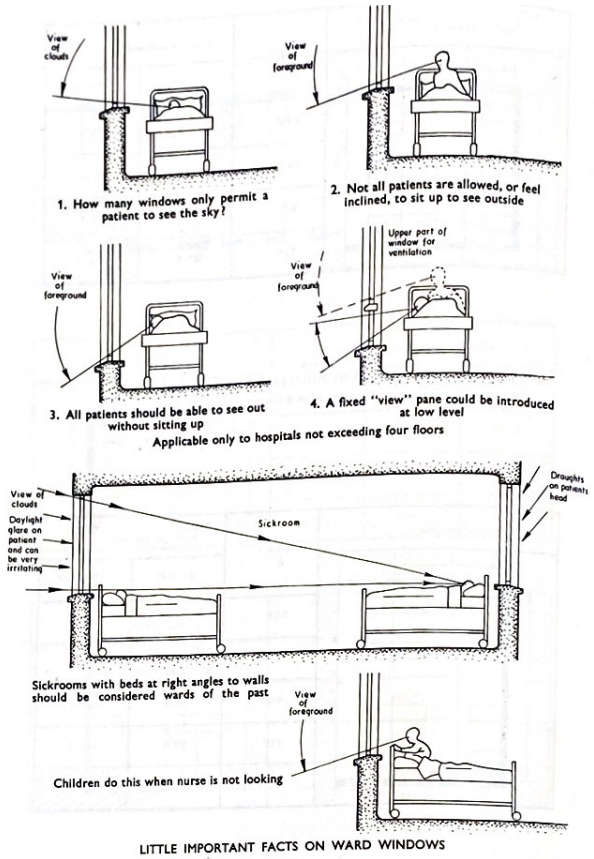


Image 8: Windows in the ward, Aldis, 1954

Additional rooms attached to the wards:

- Solarium to be attached to every ward, with ease of movement for nurses to wheel the beds. (Image 9)
- Recreation or day rooms, for socialising and a change of scenery
- Clinical and Sterilization rooms (Image 10)
- Treatment Room
- Ward Sluice Room
- Urine Test room
- Patients Lavatory and water closet
- Bathroom
- Ward kitchen (Image 11)
- Storage for clean linen and patients' clothes and luggage
- Ward office- where all patients notes must be stored
- Nurses station
- Flower room
- Visitors' rooms- including a bed for the night!

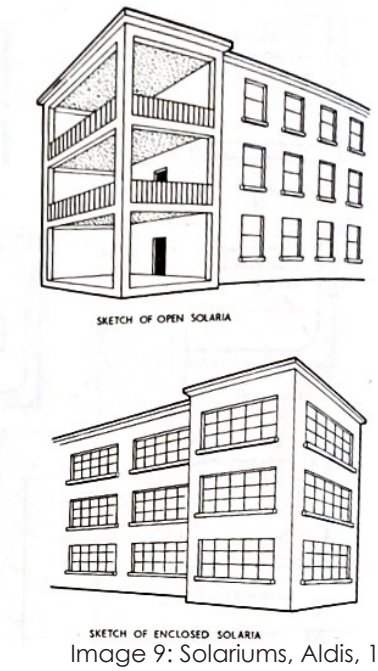


Image 9: Solariums, Aldis, 1954

In principles of hospital planning, Jefford argued that despite these layouts, "Hospitals are now being built in Great Britain which have not been based upon any comprehensive plan"(Jefford, 1967). They argue that hospitals should be specific for use and planning on an individual basis is necessary.

As part of the Yale studies in hospital function and design, which evaluated the hospital ward design, a patient study was undertaken (Thompson and Goldin, 1975). This patient study from 1974, addressed that opinions were often not spoken about when it came to the physical surroundings of a patients stay. A qualitative approach was used, with open ended questions based on the patients experience rather than hypothetical scenarios.

The results of the Survey showed the most important factors in ensuring patient satisfaction were:

- Windows
- General Furnishings
- Furniture
- Lighting
- Noise

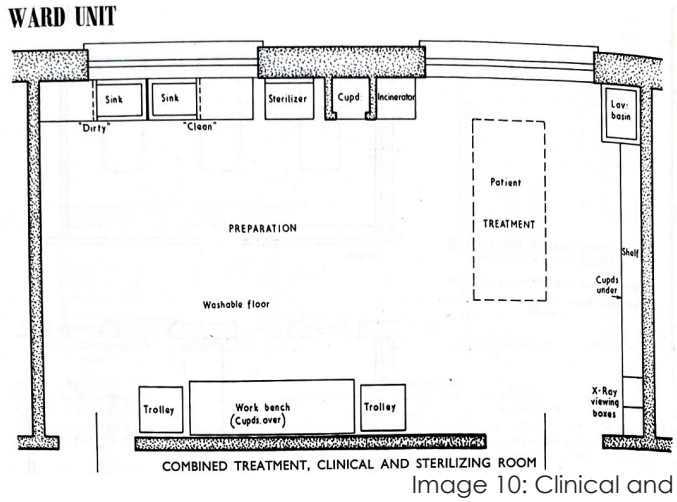


Image 10: Clinical and sterilization room, Aldis, 1954

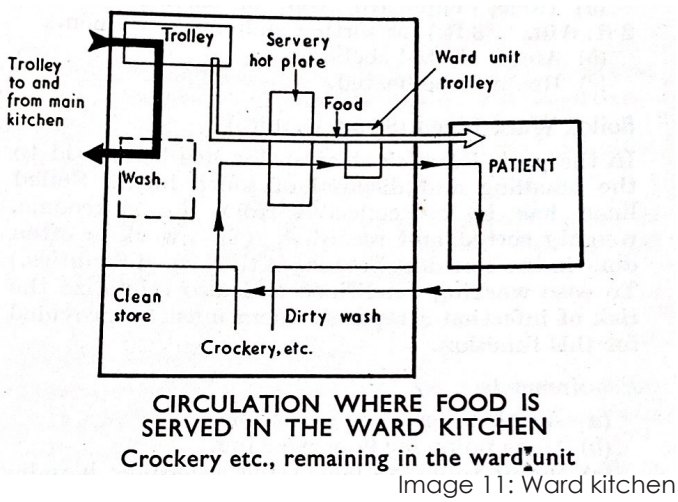


Image 11: Ward kitchen circulation, Aldis, 1954

Maternity wards History:

History before maternity wards:

Before maternity wards, a women would give birth at home with the help of her community and midwives, whose knowledge was passed down from generation to generation (Birth Injury Help Centre, 2024). Midwives used knowledge of herbal remedies to help with the pain, and after the baby was born, they stayed around for about a month to help the mother with the newborn. In Ancient Egypt, there were depictions showing women standing, kneeling and squatting whilst giving birth (Image 12). In medieval times, 1 in 3 women of child bearing age would die. In Tudor England, it was reported that 4 weeks before and after the birth, a wealthy mother would reside in her private rooms without seeing any men and this was known as lying-in, a term later used for maternity wards. Men had little to do with the childbirth, which meant documentation of childbirth is rare in lower and middle classes "due to the dominance of men as drivers of culture and the fact that women often gave birth behind closed doors" (Birth Injury Help Centre, 2024). When the introduction of forceps was used in the 17th century (DiFranco and Curl, 2014), male midwives claimed to be more experienced as women weren't allowed to use tools or do medical procedures. Therefore there was a rise in male nursing staff and doctors in maternity. For the ease of delivery, and to help with control of the forceps, the male doctors made women lie on their backs to give birth (Weisman, 1992).

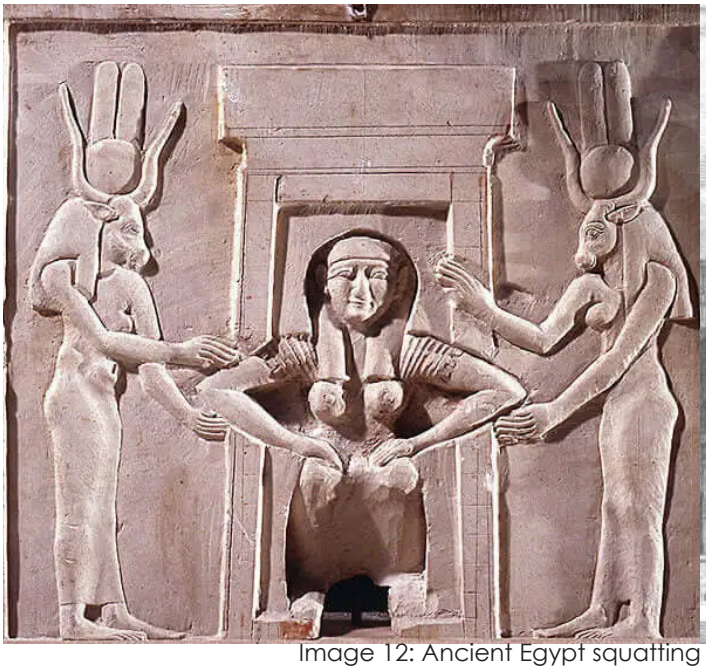


Image 12: Ancient Egypt squatting birth, Elsevier, 2005

Image 13: New city of London lying in ward, Richardson, 1998

History:

The maternity ward was the earliest specialist ward to appear in England (Richardson, Goodall, and Royal Commission, 1998). Limited accommodation for women in labour was available at St Bartholomew's and St Thomas'. Women generally gave birth at home as there was less risk of infection and death (5.1 per 1000 deliveries at home verse 25.3 per 1000 at Queen Charlottes from 1828 to 1868). Therefore the main justification for establishing the maternity hospital was for teaching and training of midwifery. This is supported with evidence from American history too. Few midwives were educated, and most were taught through experience. In the 1770's Robert Mylnes' new city of London lying in ward was erected (Image 13), in collaboration with leading gynaecologists including Dr Hulme. He recommended it should be composed of long spacious rooms with a range of beds on castors on each side, fireplace directly in the middle, windows at each end and a ventilator fixed in each window as per the pavilion plan.

Queen Charlottes and Chelsea Hospital:

In 1739, a 'man midwife', Sir Richard Manningham, established a small lying-in infirmary as a voluntary hospital, which evolved eventually into the Queen Charlotte's Hospital (Richardson, Goodall, 1998)(Image 14). To start with the maternity hospital lacked the funds and the organisation required to work efficiently. King George III took interest in the hospital, and in 1816 appointed queen Charlotte as the patron. This interest encouraged prince/princesses and over 100 people of nobility and titles to donate funds, which saw an improvement in the way the hospital ran. The patronage passed down through the royal line, eventually preceded by Queen Victoria (Ryan, 1885). Queen Charlotte's was the first hospital to provide a separate ward and support for unmarried women. In 1974, following a reorganisation by the NHS, Queen Charlotte Maternity and Chelsea Women's combined to form the Queen Charlotte's and Chelsea women's hospital. (Lost_Hospitals_ of_London, 2015)

Image 14: Queen Charlottes Maternity Hospital c.1905, Evans, 2025

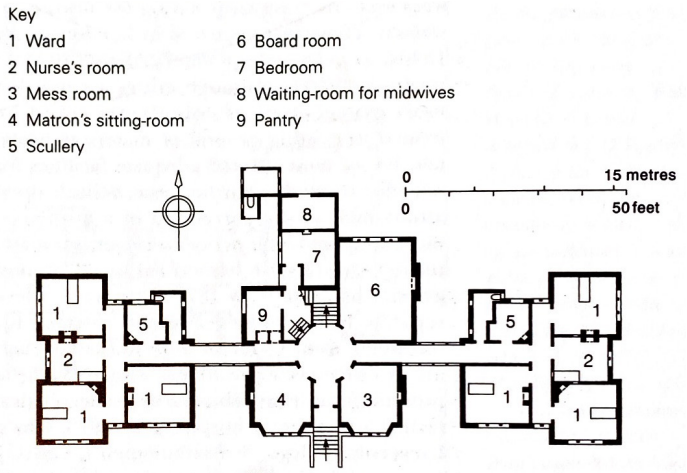


Image 15: Liverpool Lying in hospital 1884, Richardson, 1998

Florence Nightingale input and Elizabeth Garett Anderson:

Florence Nightingale's earlier remarks on hospital design, influenced maternity wards too, providing a safer environment for birthing. She noted in her writing "Introductory notes of lying- in institutions" the high death rate among patients at the Charles Hawkin's new Queen Charlotte Hospital in 1855, 25 in 1000 deliveries (Richardson, Goodall, 1998). This was significantly worse compared to a London workhouse which provided maternity facilities for lower classes. The main causes of these deaths were child bed fever (puerperal fever), highly contagious and easily spread with bad ventilation, which Nightingale remarked was due to the objectionable structural arrangements(McDonald, 2006). Similar comments could be made about King's college Hospital, which was lacking cross ventilation. Florence wrote about an earlier precedent, Waterford Lying- in hospital, which reduce its death rate by over half by splitting the room of 8 beds into 2 rooms of 4 beds. However "small- hospital idea is not sufficient in itself"(McDonald, 2006). As an improvement, she suggested a similar approach to military maternity wards, using detached blocks, less beds and access to fresh air. An additional idea to have a separate labour room was thought as unnecessary by doctors. The first hospital to use these ideas was Liverpool Lying-in Hospital in 1884 (Image 15). In 1860, she set up a midwifery training scheme at King's college hospital in Lambert (How Florence Nightingale shaped London healthcare, 2024).

Elizabeth Garrett Anderson (image 16) was another leading figure in hospital design for women and maternity, being a female doctor meant she received praise from women and was favoured over male doctors, an important reason for starting up a hospital staffed entirely by women. In 1872, she founded the first British hospital for women in London (UCL, 2018)(Image 17). She appointed the architect John McKean Brydon to design a 42 bed hospital, built in 1890 on Euston Road(Elizabeth Garrett Anderson Hospital Building, 2016). The hospital was advised on "sanitary and other arrangements" by Florence Nightingale (a life governor of the hospital) and Sir Douglas Galton, who both agreed to the three-block design. Elisabeth's sister and cousin, Agnes Garett and Rhoda Garett were architectural pupils of John McKean Brydon, and in 1875 they established the first female run interior design practice in Britain (AHRnet, 2024). Nightingale suggested to make changes to avoid overcrowding as this was fatal, especially in a women's hospital. But ultimately, the plans (image 18) were submitted for approval, and this was seen as a huge achievement for Garett Anderson.

Image 16: Elizabeth Garret Anderson

Image 17: The new hospital for women 1890

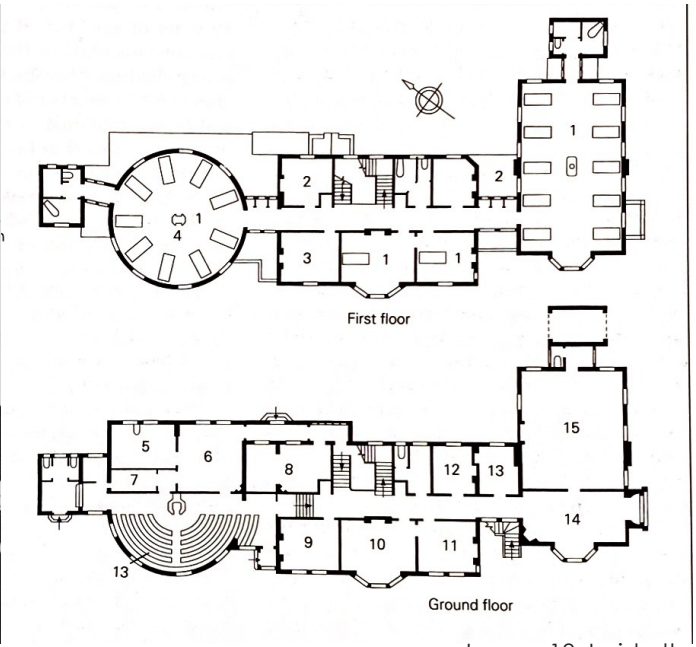


Image 18: Inside the hospital, Richardson, 1998

American history account of maternity ward:

Leslie Kanes Weisman criticises and argues that the maternity ward in America was designed for the male doctor's schedule and not for the mother (Weisman, 1992). Upper class households would send their servants to the new maternity wards for treatment as these allowed doctors to practice new techniques on them before visiting the homes of the wealthy. However, as this was to help with the doctor's schedule, women would be tied on their backs to the table to make the jobs easier for doctors. If a doctor had a space in his schedule and the mother wasn't ready, she would be induced to give birth. If a woman was ready but no doctors were available, her legs would be tied together to stop the birth. Some women would try running away or even committing suicide so they would not have to go through this. This meant mortality rates of the maternity ward was high, so women chose home births over the hospital if they could afford. This correlated with English history on maternity wards, with similar high mortality rates, and unsanitary birthing conditions for lower class families.

History of 1950's Maternity Ward:

Average women in the 1950's spent twelve days in hospital, two of which she was ambulant, whilst giving birth (Aldis, 1954). The ward is best planned in a separate building, and not necessarily in the ground of the general hospital. The referral of a maternity nurse is "sister". Maximum beds is sixty, twenty beds for mothers means forty patients including the baby so twenty beds is seen as max per "sister".

Maternity units include space for:

- Reception of patients
- Ante-natal patients
- Observation and Septic patients
- Delivery theatre suite
- General maternity patients
- Mother craft unit

No more than 8 patients per bedroom, provide single rooms are also provided. This is different to the general hopsital ward, which allowed for more patients.

Other rooms:

- Nursery- The pros and cons for having the new born babies kept with their mothers over being kept in a nursery. Rooms include a general nursery, sick nursery, premature babies room and a baby's bathroom.
- Examination room
- Labour ward
- Sterilizing room, mist be attached to the labour ward
- Sisters room
- Sluice room
- Clean linen store
- Doctors' office
- Blood bank
- Pathological- laboratory facilities

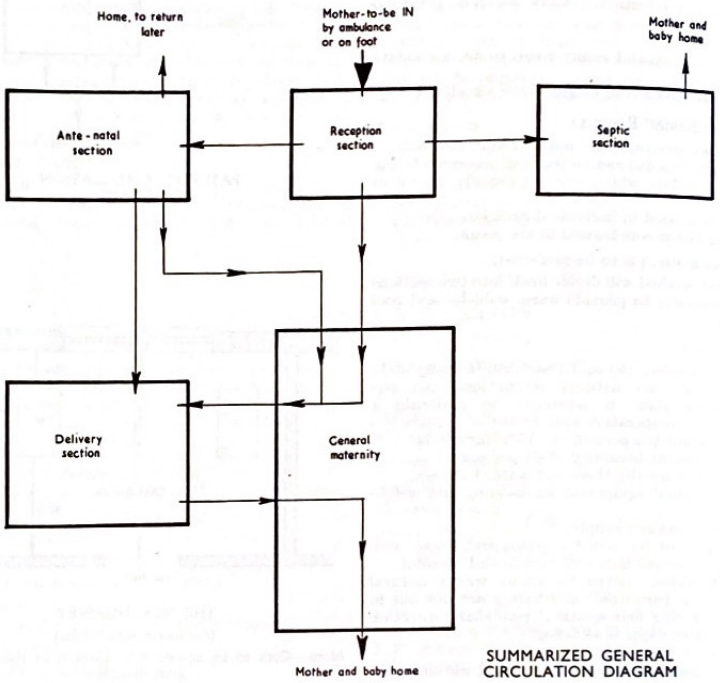


Image 19: Circulation of Ward, Aldis, 1954

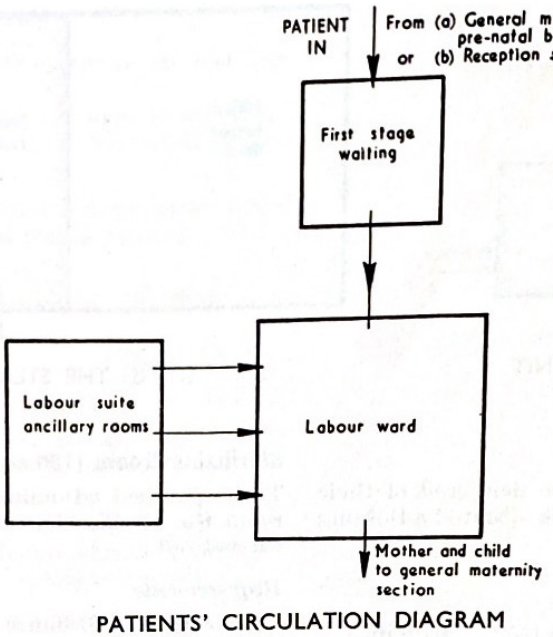


Image 20: Patients circulation, Aldis, 1954

First stage waiting room with a bed- one mother only, before being transferred to the labour ward, it may be necessary for her to deliver in this room(image 20). First stage waiting room without a bed Is essentially a standard waiting room, however it is disputed by doctors who believe this space is unnecessary.

Major labour wards should be flexible spaces, providing for the routine labour delivery but can be transformed into an operation theatre if necessary. The labour wards adjoining this space, and this is used for most deliveries.

Methodology

The aims for this research were to investigate maternity ward designs, why they're designed the way they are and if any changes have been made for the consideration of women. This came from my personal biases as a women and worldview on feminist ideas and equality for women in spaces. The maternity ward is a space that I thought could be undisputed as a space meant for women.

My dissertation will take on a qualitative approach, using data from two surveys, similar to the Yale study, asking maternity ward staff as well as patients, in this case mothers, their opinions as the users of the space. The Yale studies (Thompson and Goldin, 1975) on hospital design is a comparative method to the surveys I have undertaken. Primary data used was collected from the surveys and secondary data for the literature review, comparing the data to. This also allowed me to show any research that is currently available and a gap in the field for more research to be undertaken.

Surveys were chosen as it allowed the data to be collected to represent current opinions. Maternity ward staff use the spaces daily and have the medical training to make informed choices over births, and this information is important for designing maternity wards. This Maternity Ward staff survey used primary data provided by Manchester maternity units, with 44 participants. The survey was distributed at the start of February and collected data for one month, although most results were collected before February 14th. The mothers survey had 21 participants, collecting data from start of February.

The questions asked in the survey to maternity staff were:

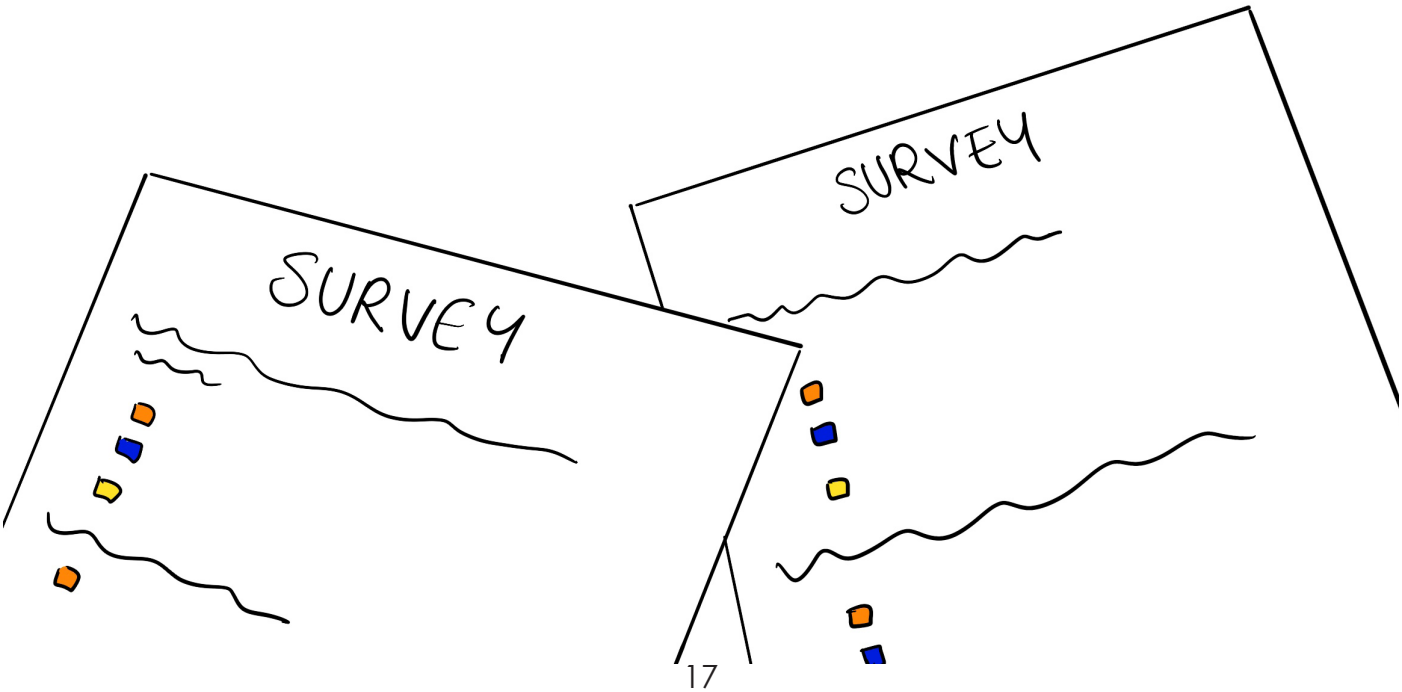
- How long have you worked within maternity?
- Where do you currently work?
- What maternity ward design concepts are most important for your job?
- Are all these (that are most important) provided in the maternity ward?
- What do you think mothers consider most important for comfort when in a maternity ward?
- Are all these (that are most important) provided in the maternity ward?
- What birthing position is often preferred or recommended for the mother during birth?
- Do you think the maternity ward provides space for all these birthing positions?
- What do mothers prefer to use during labor on the maternity ward?
- Does the design of your maternity ward differ from other ward designs in the hospital?
- What is successful in the current maternity ward design?
- What improvements would you make to the design of the maternity ward?

These questions were asked to understand trends that may occur due to work location or experience in years compared to the latest teaching. To compare the responses for questions that depend on who we are designing for, maternity staff for their jobs or mothers for their comfort. This helps determine whether the ward is designed for function.

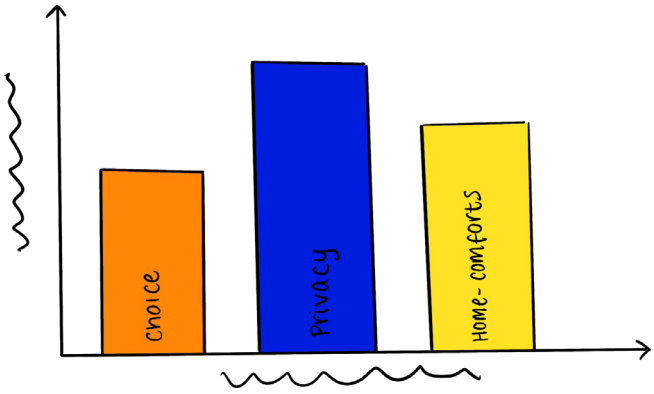
The questions asked in the survey to mothers were:

- How long since you gave birth?
- Where did you give birth?
- What was the reason for your choice to give birth here?
- Did you give birth in a maternity ward in the NHS or private?
- What do you think was most important for your comfort when in the maternity ward?
- Are all these (that are most important) provided in the maternity ward?
- Did you feel like you had the choice of birthing positions?
- What birthing position would you have preferred during birth?
- What birthing position did you use during birth?
- Do you think the maternity ward provides space for all these birthing positions?
- What did you prefer to use during labor on the maternity ward?
- Did the design of the maternity ward differ from other ward designs in the hospitals that you have visited?
- What is successful in the current maternity ward design?
- What improvements would you make to the design of the maternity ward?

Research limitations of the study, include the number of participants as well as gaps in literature. There were gaps in participants who had given birth between 5-15 years ago, and this was due to the distribution of surveys going to those I knew who had recently given birth, or those of our parents' generation.



The Results



These findings can be summarised into three categories: choice, privacy, and home comforts. From the literature review, reasoning behind the introduction of maternity wards was due to male influence and this resulted in women's choice over their birthing experience being removed. Choice will look at the mothers right to choose their birth plan, place, and position. Private rooms and noise-controlled spaces were the most important to mothers (Figure 5). Privacy will talk about the vulnerability of the process of childbirth and the need for closed off spaces, en suites and how this affects the maternity staff's ease of work. The main improvements given in the comments of the survey were related to décor, lighting, and other home comforts. Therefore, home comforts will include the aesthetics, furniture, and lighting within the maternity ward.

The number of years since giving birth showed a higher number of responses from mothers who gave birth less than two years and more than twenty years (Figure 1). Whereas for the maternity staff survey, years of experience peaked at three to five years and over twenty years, with a more even distribution between categories (Figure 17). In the mothers survey, removing those who has home births, 83% gave birth in hospital maternity wards, a further 11% were transferred to hospitals from the birth centre (Figure 2).

Maternity staff were more conclusive than mothers when asked if their ward differs from other wards in the hospital. Mothers answered "I don't know" 67% compared to 11% of maternity staff (Figure 14). According to 50% of the results from maternity staff, the maternity ward does differ from others spaces in the hospital (Figure 24).

Colour Key:

Mothers Survey Responses

Maternity Staff Survey Responses

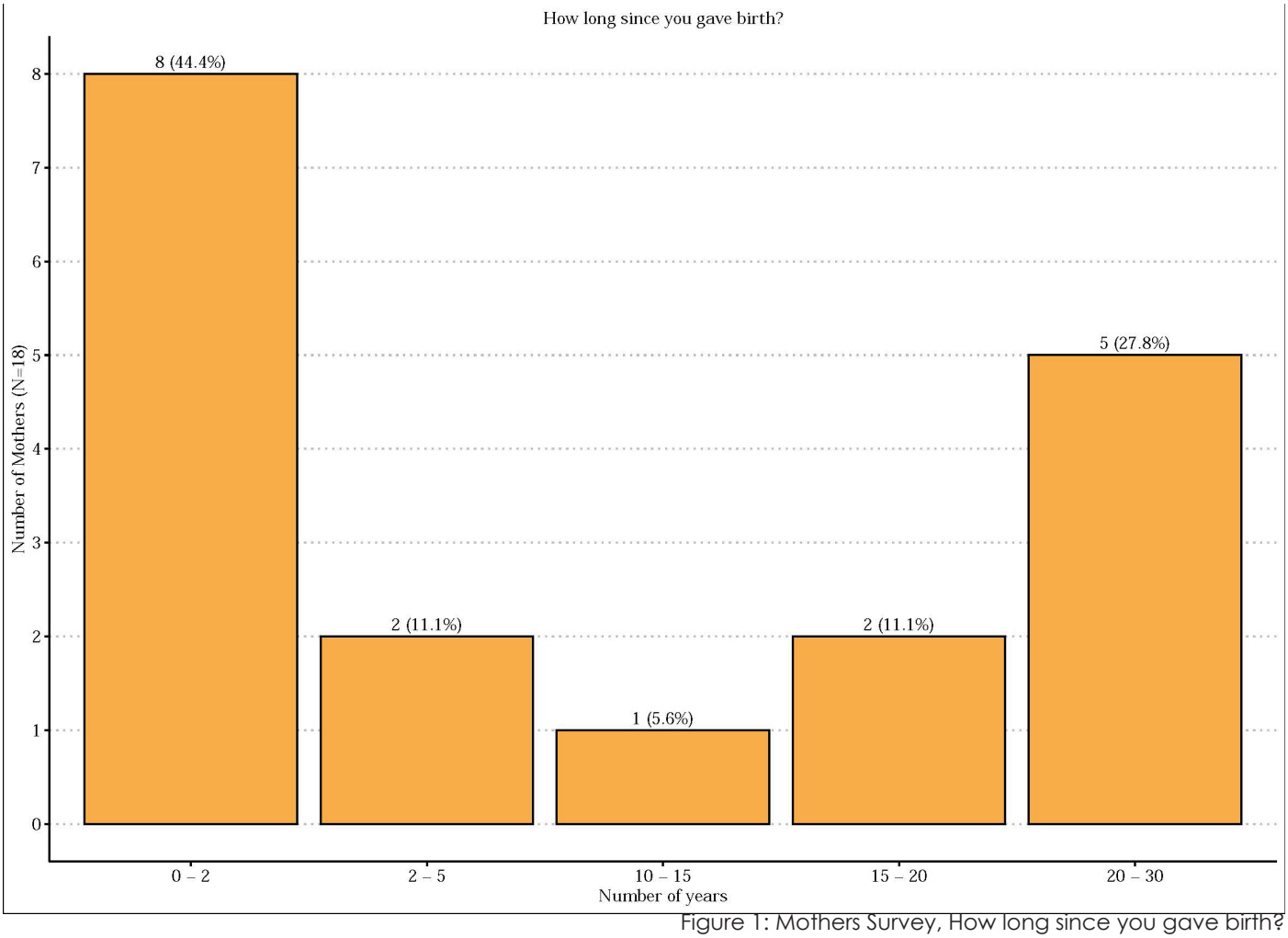


Figure 1: Mothers Survey, How long since you gave birth?

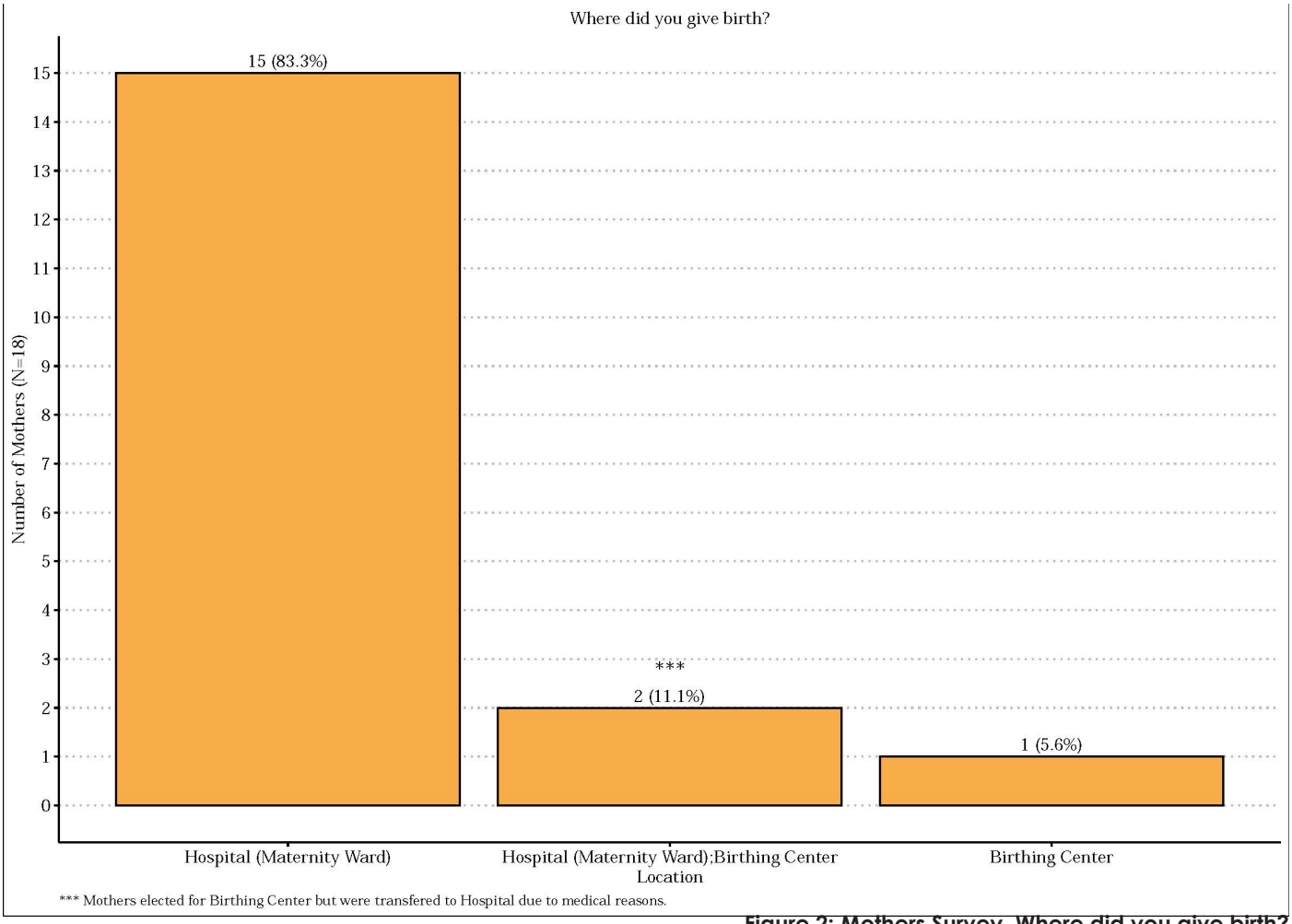


Figure 2: Mothers Survey, Where did you give birth?

Figure 3: Mothers Survey, Why did you give birth at the birthing center?

Figure 4: Mothers Survey, Why did you give birth at the Hospital?

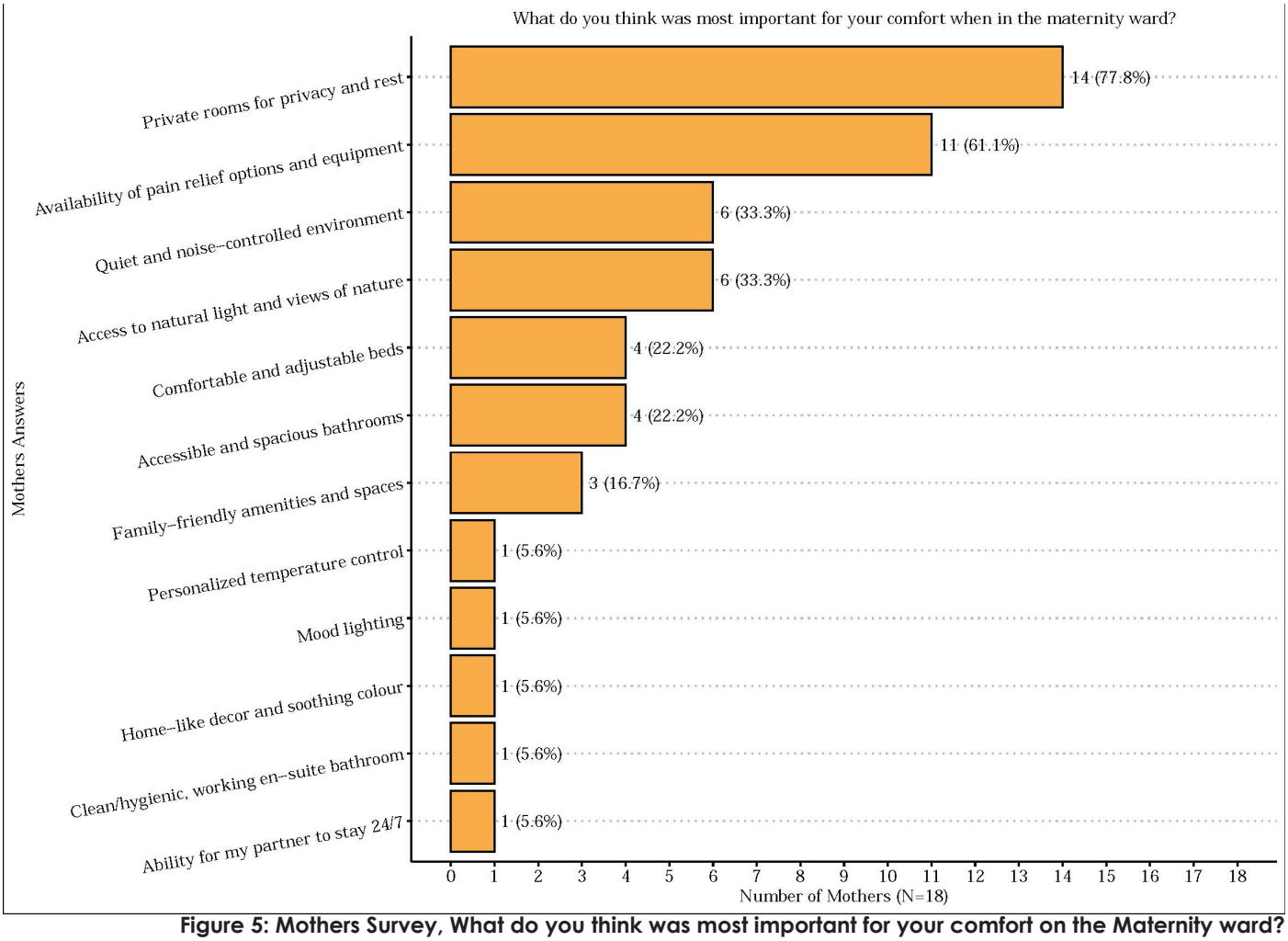


Figure 5: Mothers Survey, What do you think was most important for your comfort on the Maternity ward?

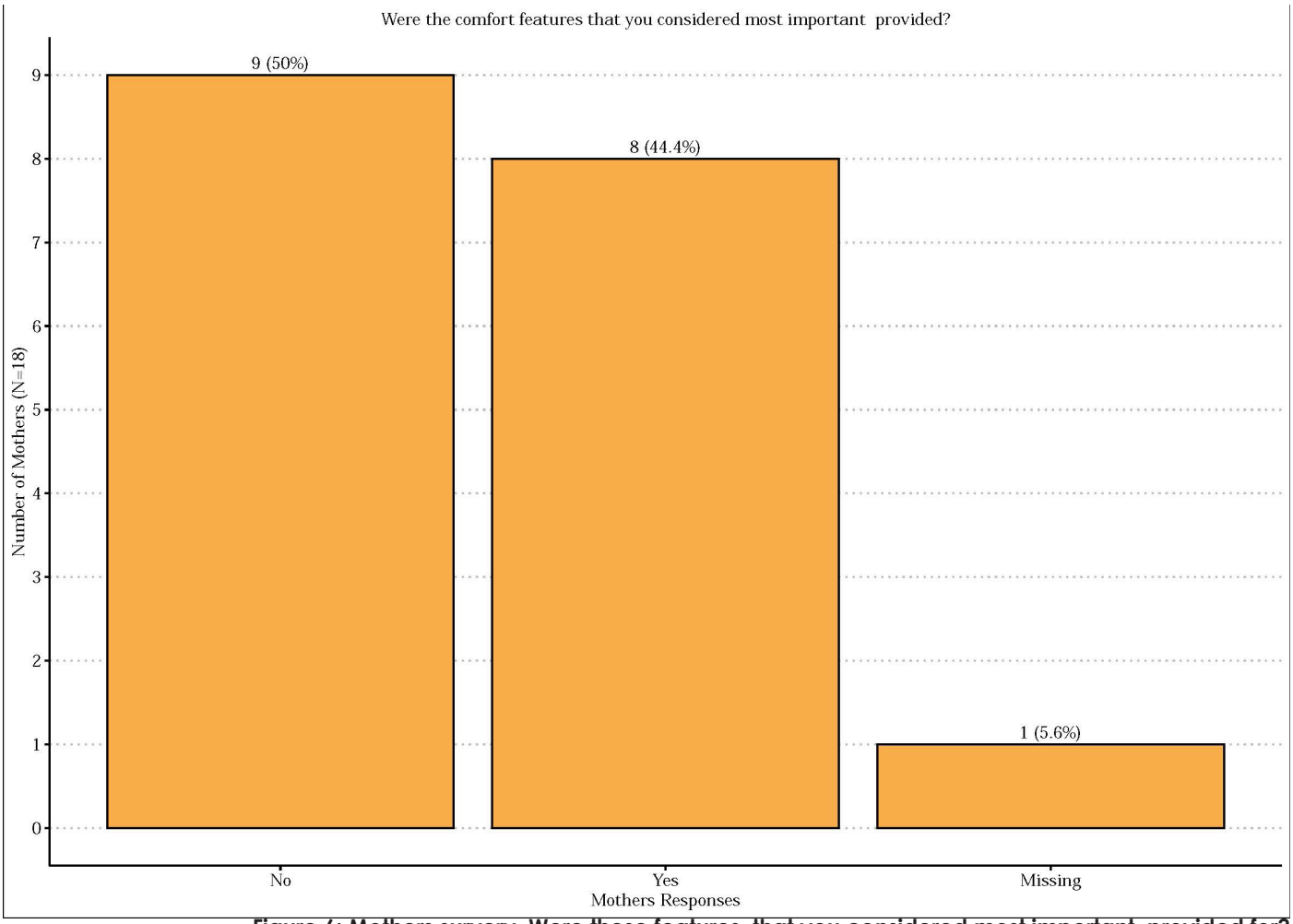


Figure 6: Mothers survery, Were these features, that you considered most important, provided for?

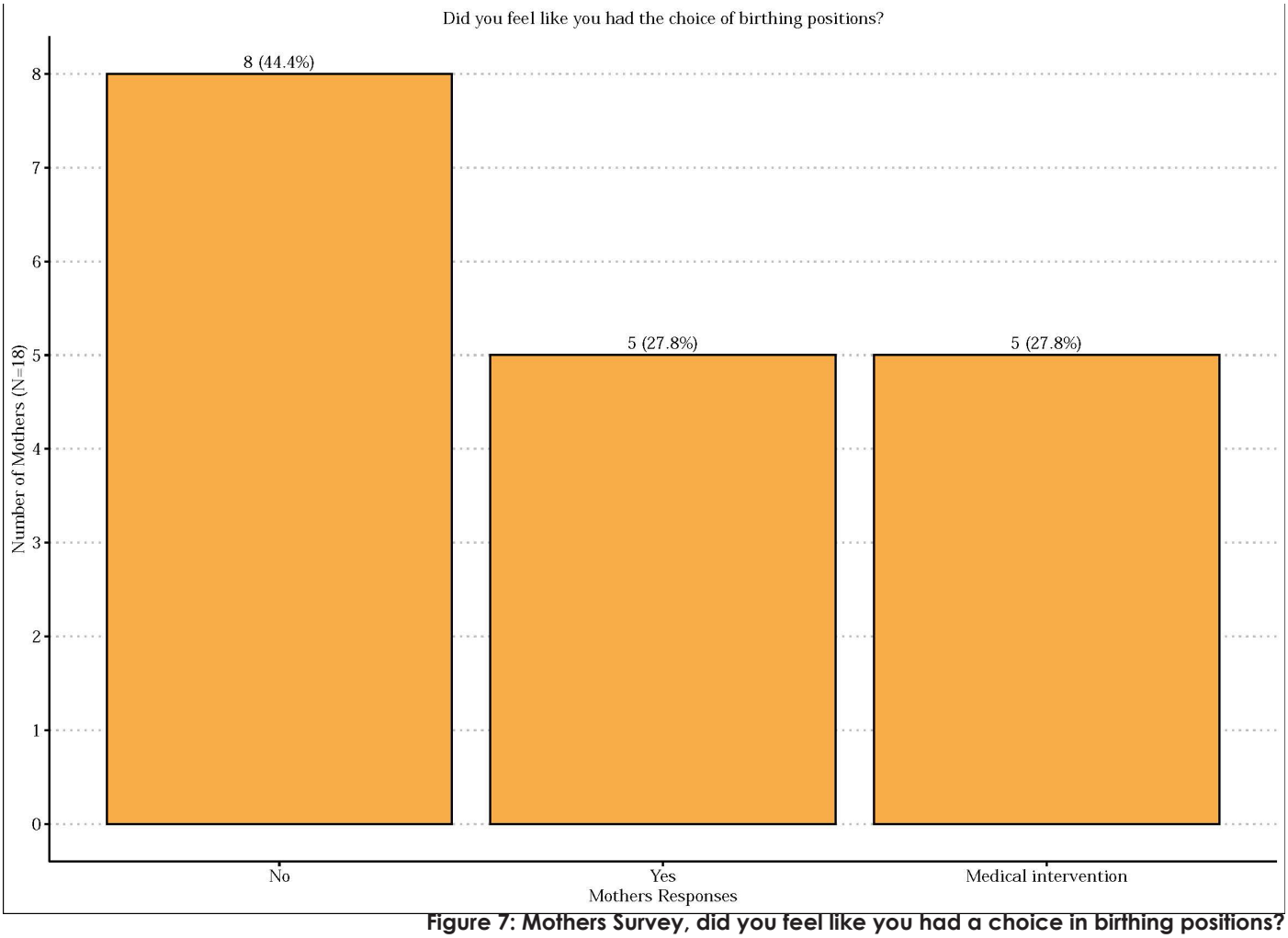


Figure 7: Mothers Survey, did you feel like you had a choice in birthing positions?

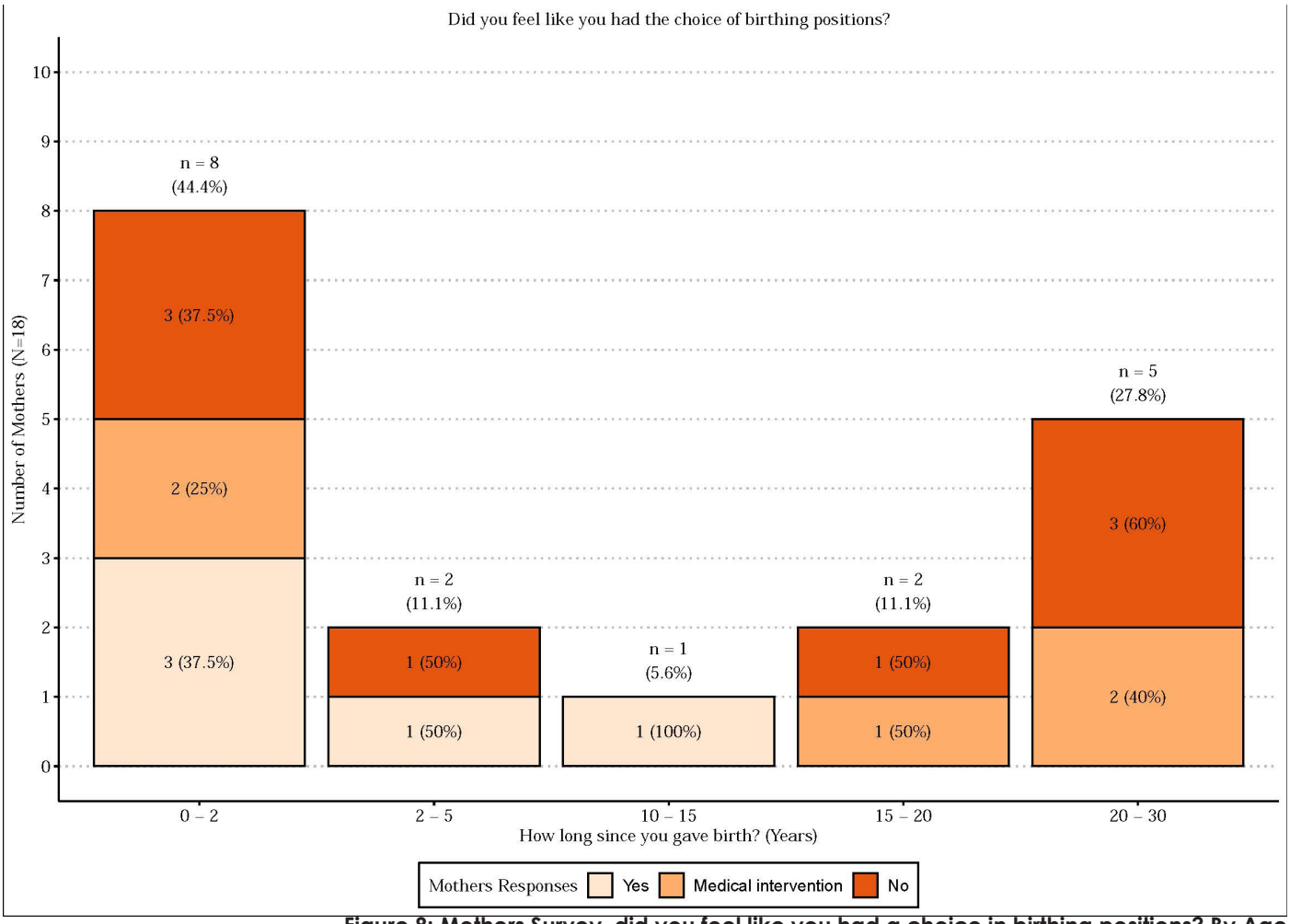


Figure 8: Mothers Survey, did you feel like you had a choice in birthing positions? By Age

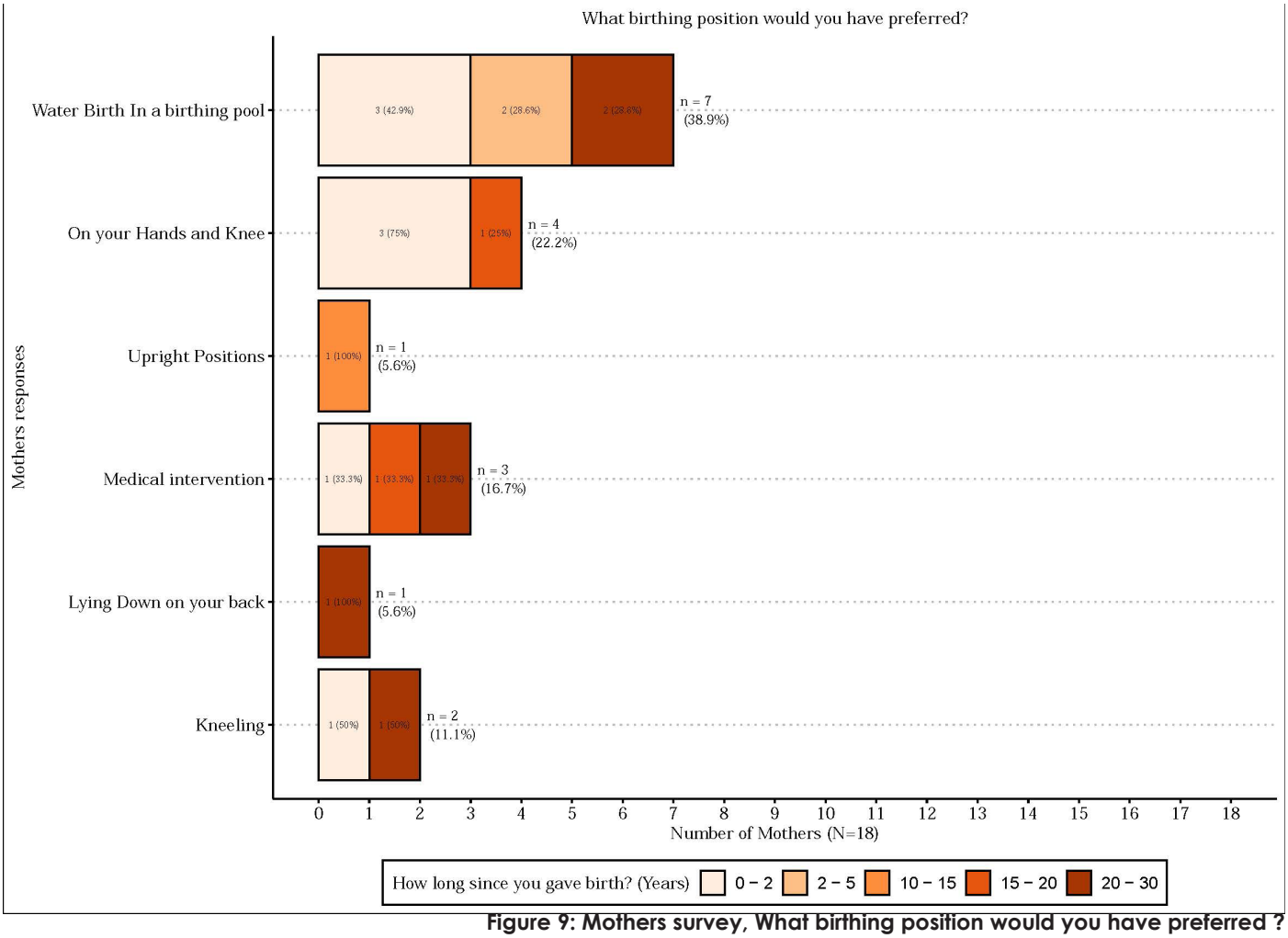


Figure 9: Mothers survey, What birthing position would you have preferred ?

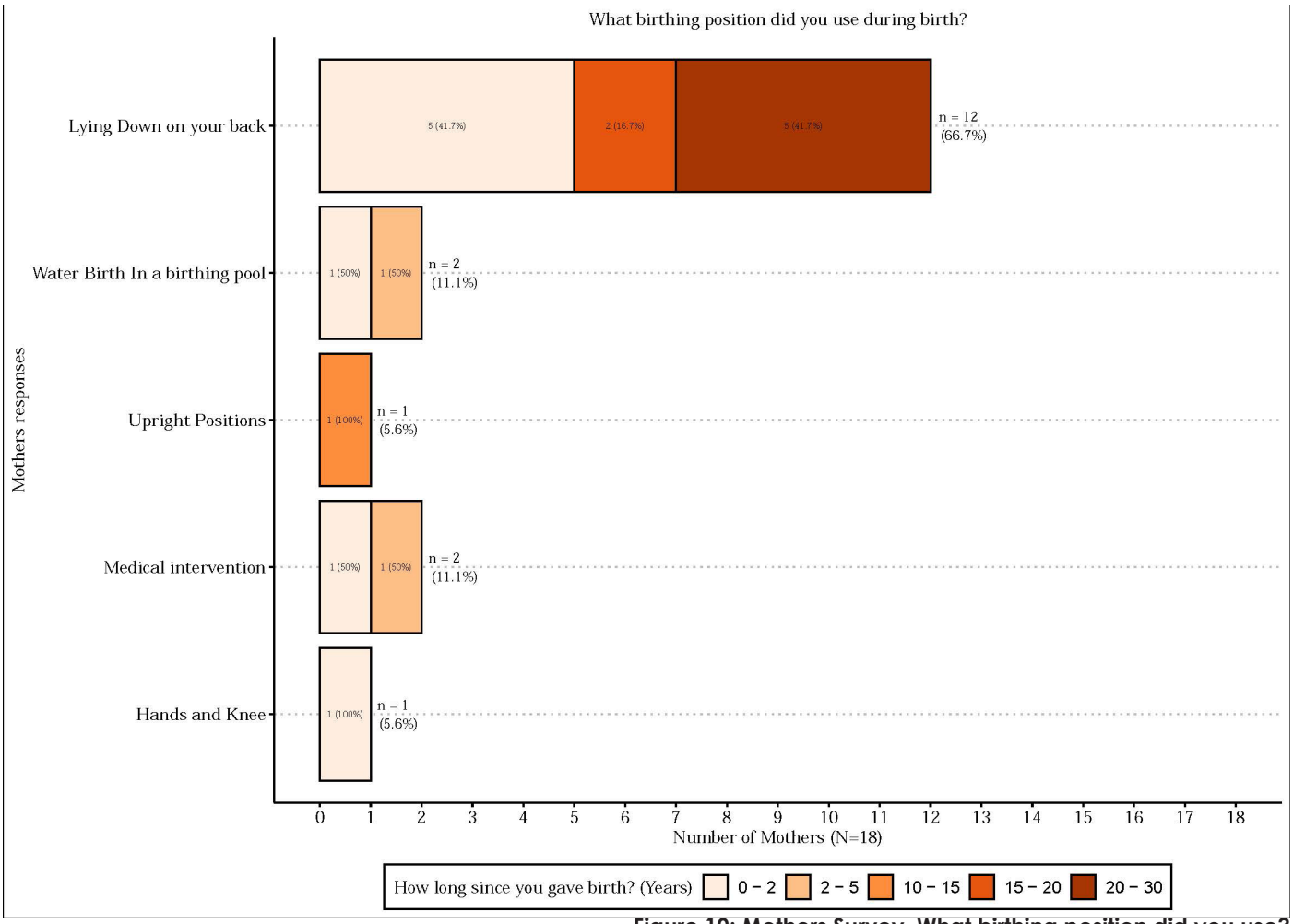


Figure 10: Mothers Survey, What birthing position did you use?

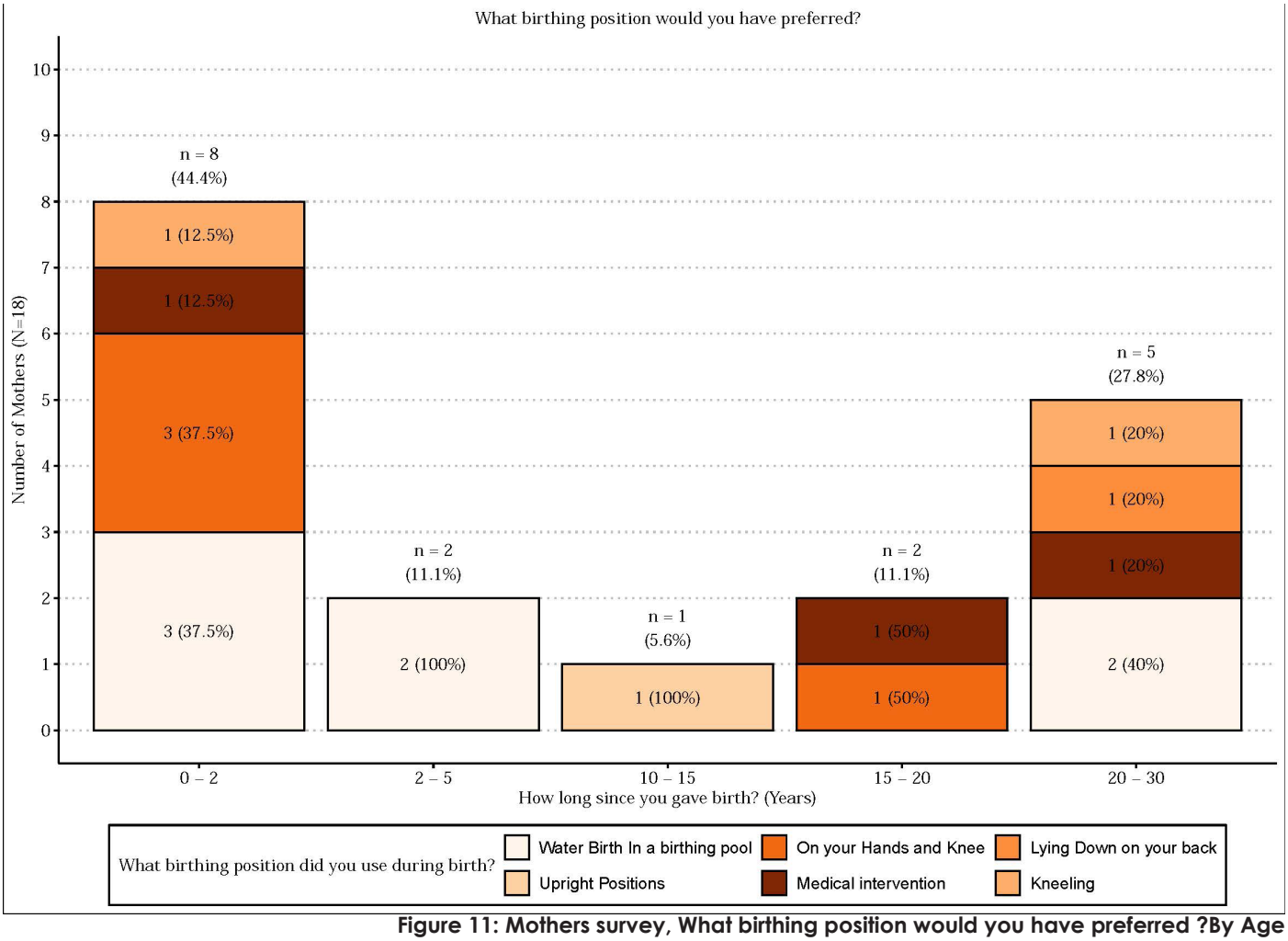


Figure 11: Mothers survey, What birthing position would you have preferred ?By Age

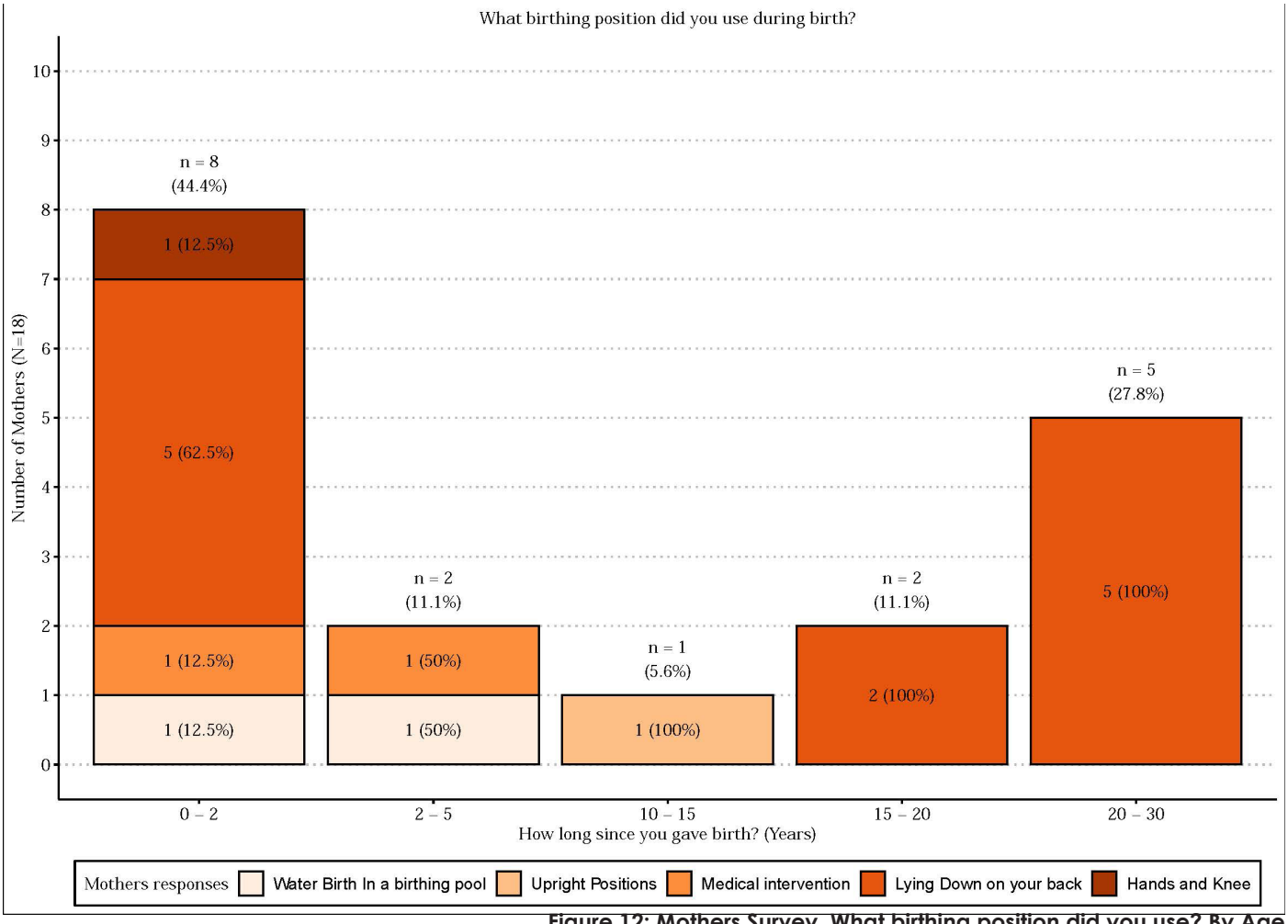


Figure 12: Mothers Survey, What birthing position did you use? By Age

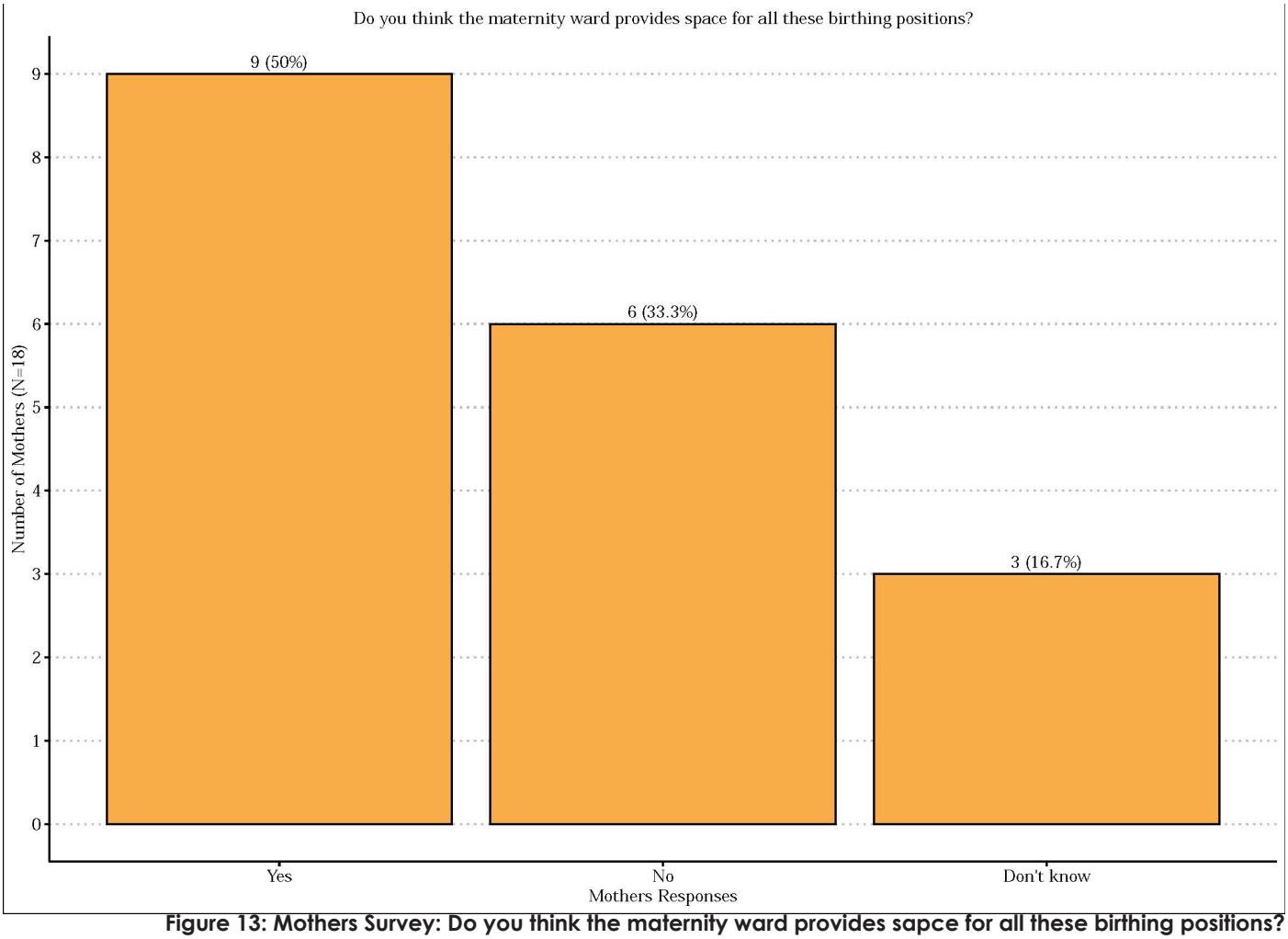


Figure 13: Mothers Survey: Do you think the maternity ward provides sapce for all these birthing positions?

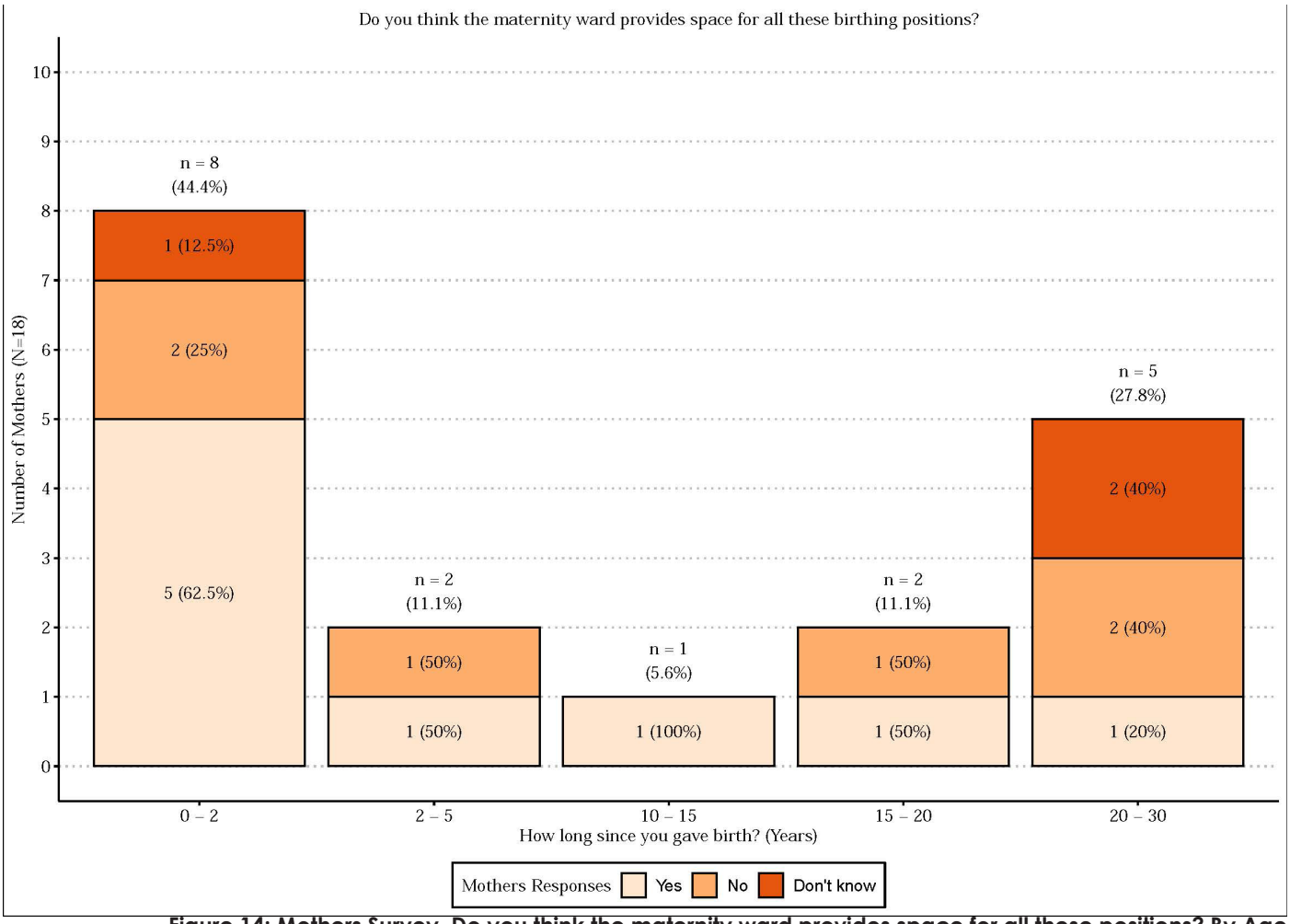


Figure 14: Mothers Survey, Do you think the maternity ward provides space for all these positions? By Age

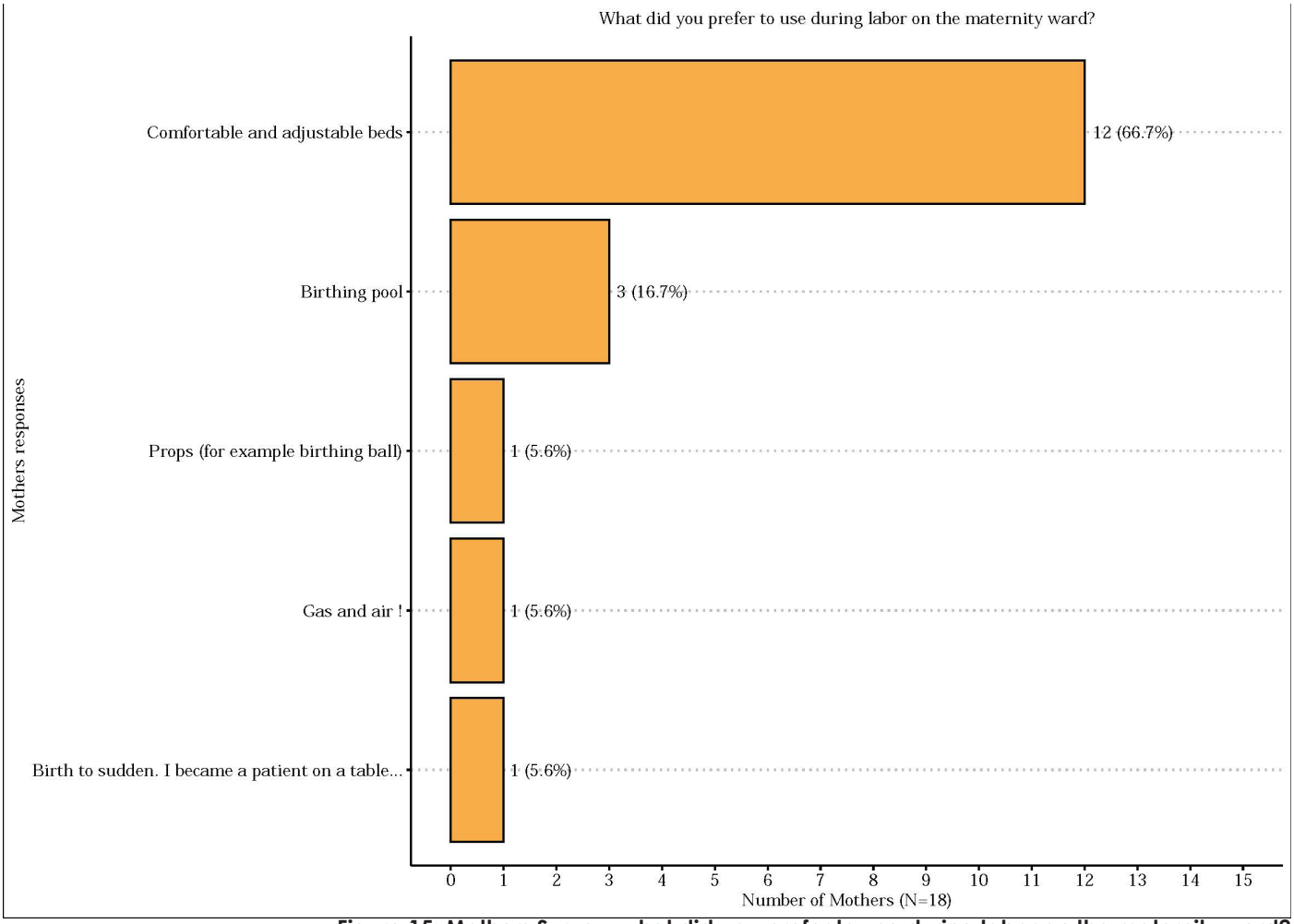


Figure 15: Mothers Survey, what did you prefer to use during labor on the maternity ward?

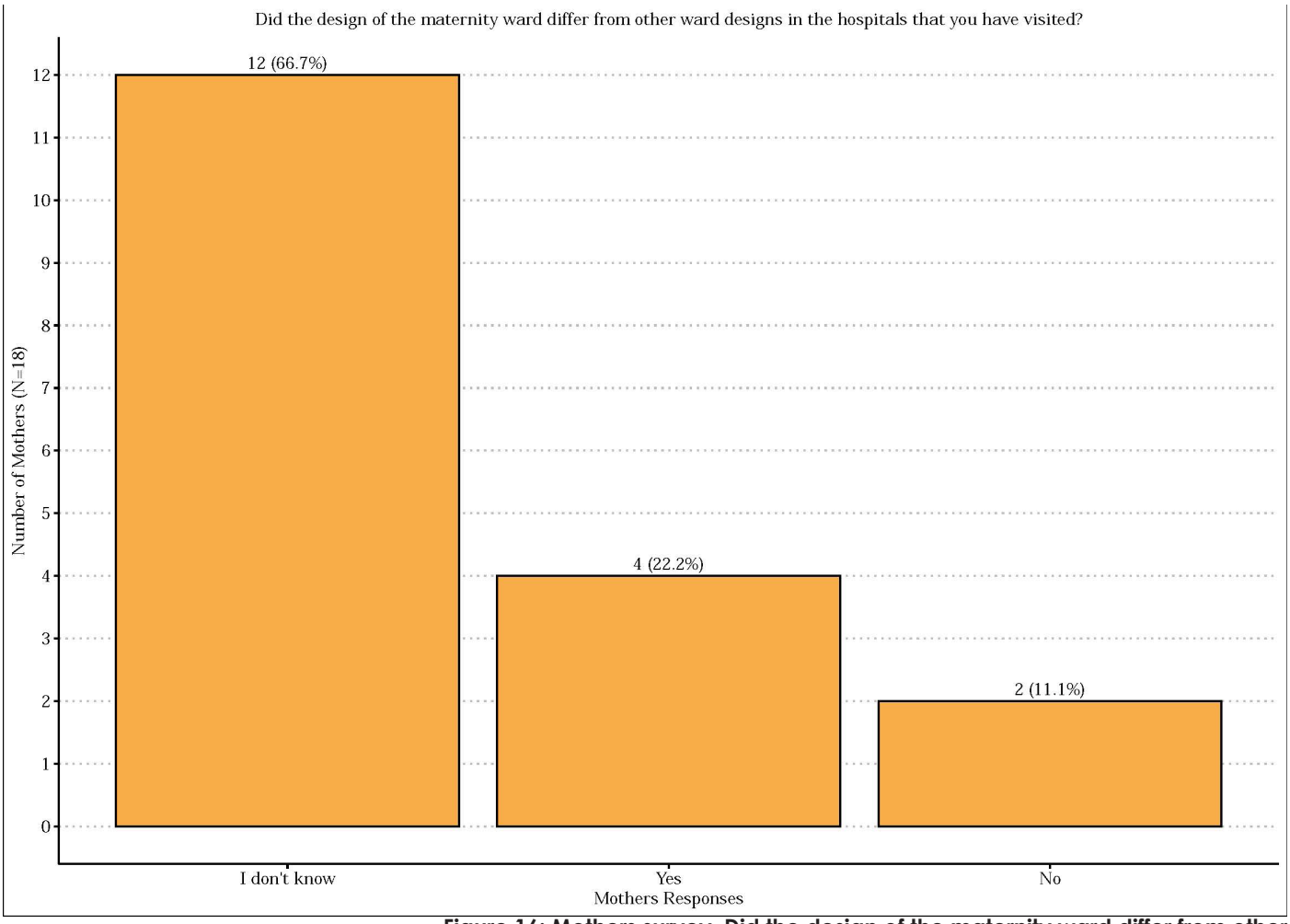


Figure 16: Mothers survey, Did the design of the maternity ward differ from other ward designs in hospitals that you've visited?

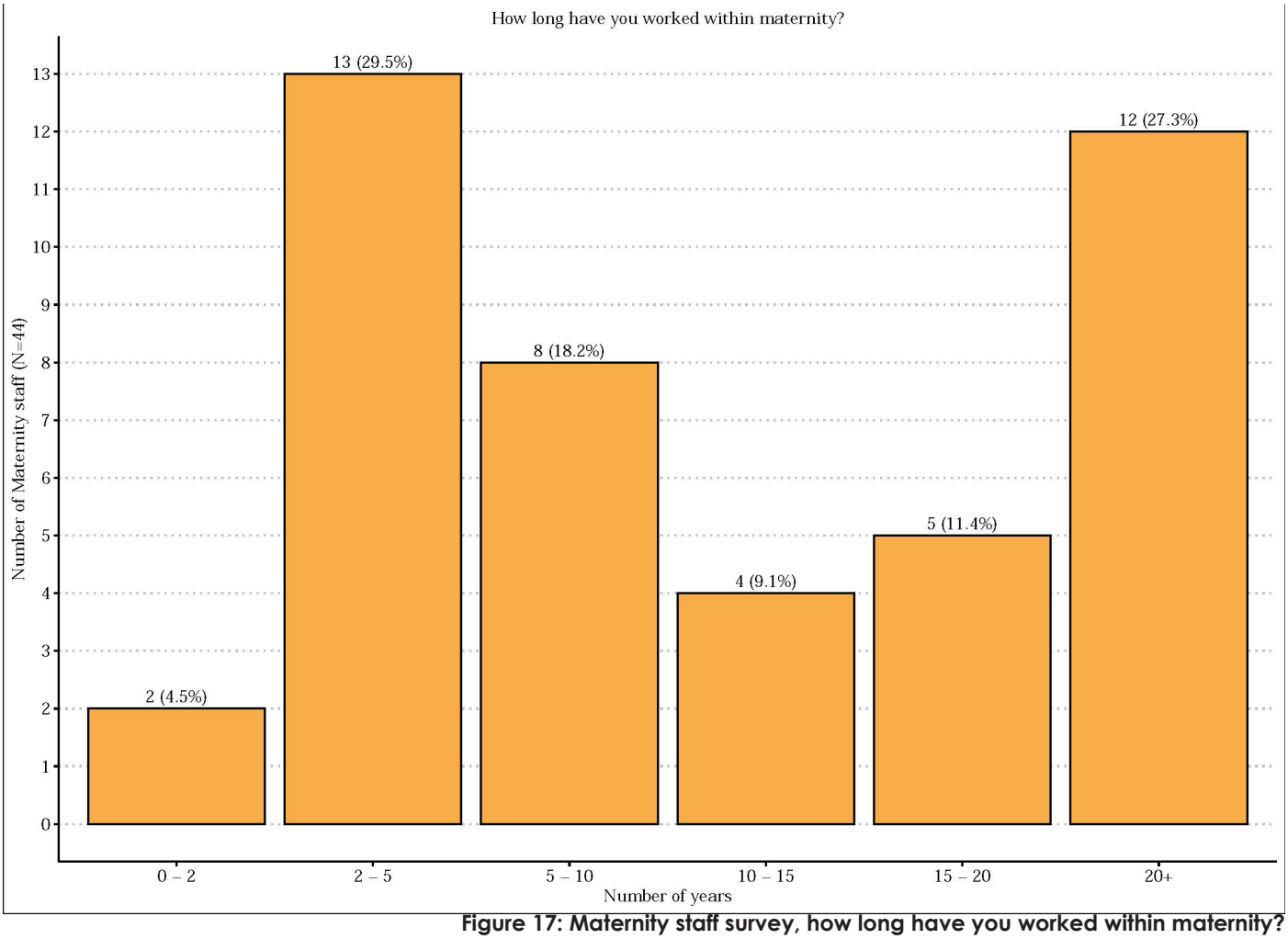


Figure 17: Maternity staff survey, how long have you worked within maternity?

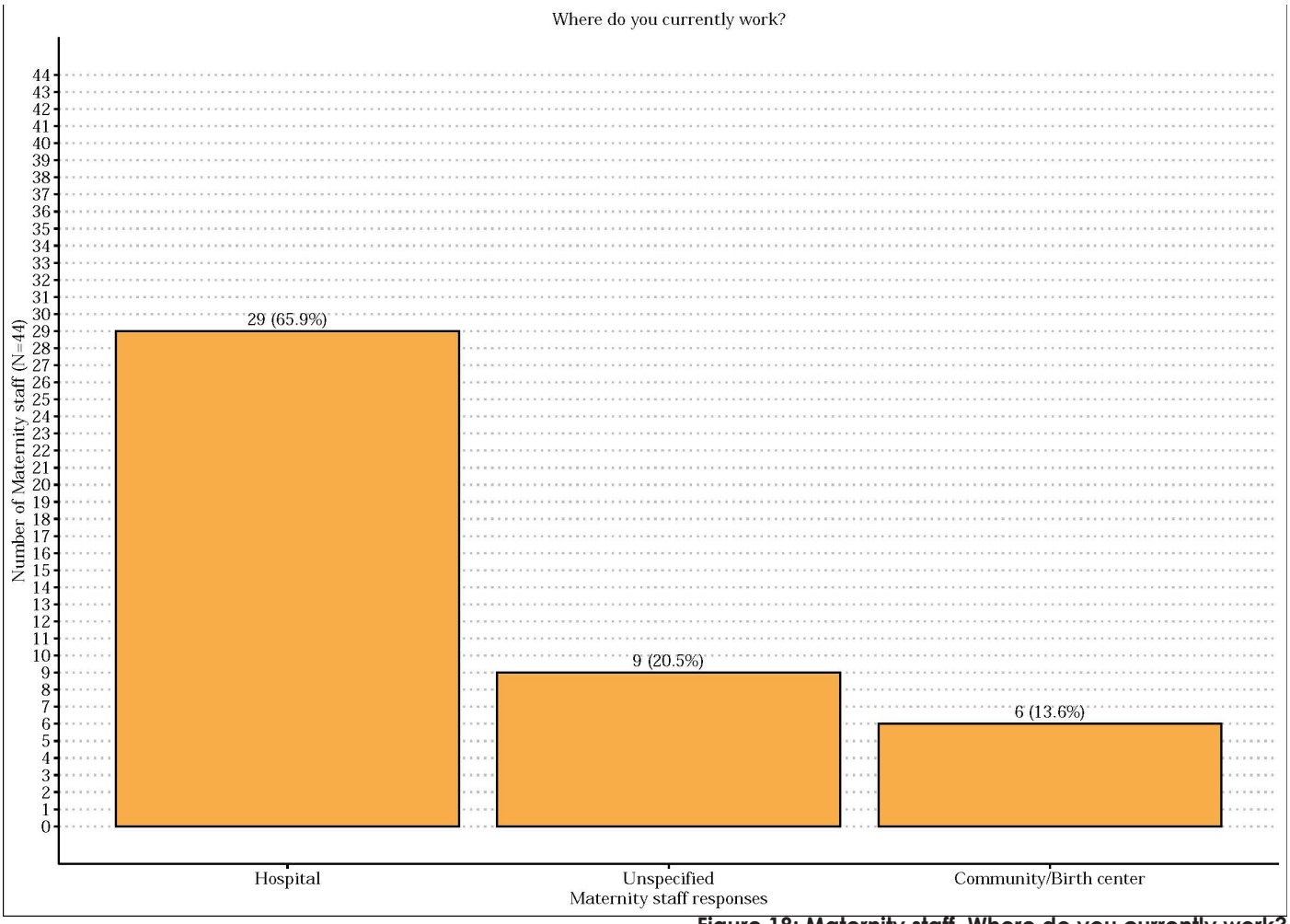


Figure 18: Maternity staff, Where do you currently work?

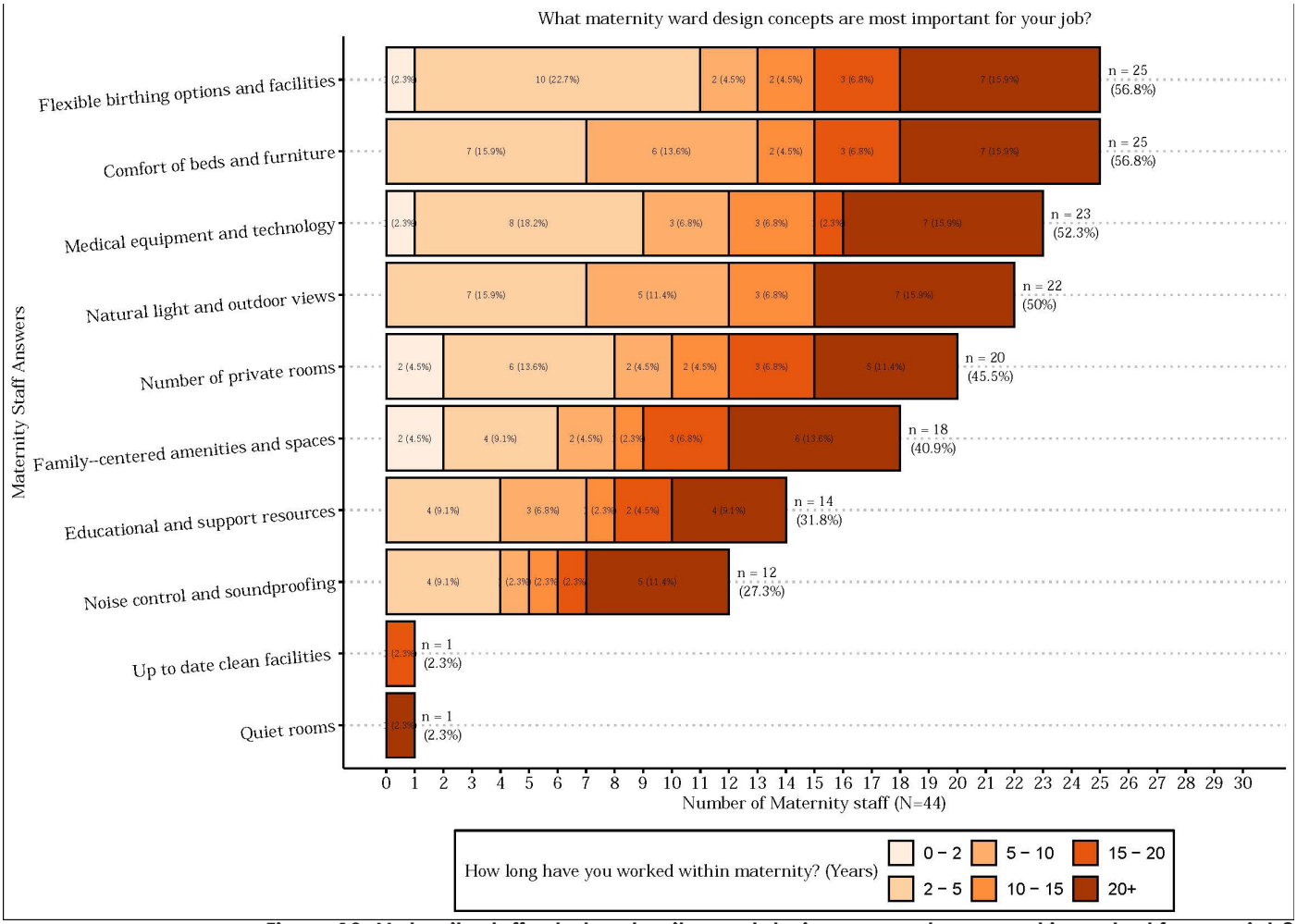


Figure 19: Maternity staff, what maternity ward design concepts are most important for your job?

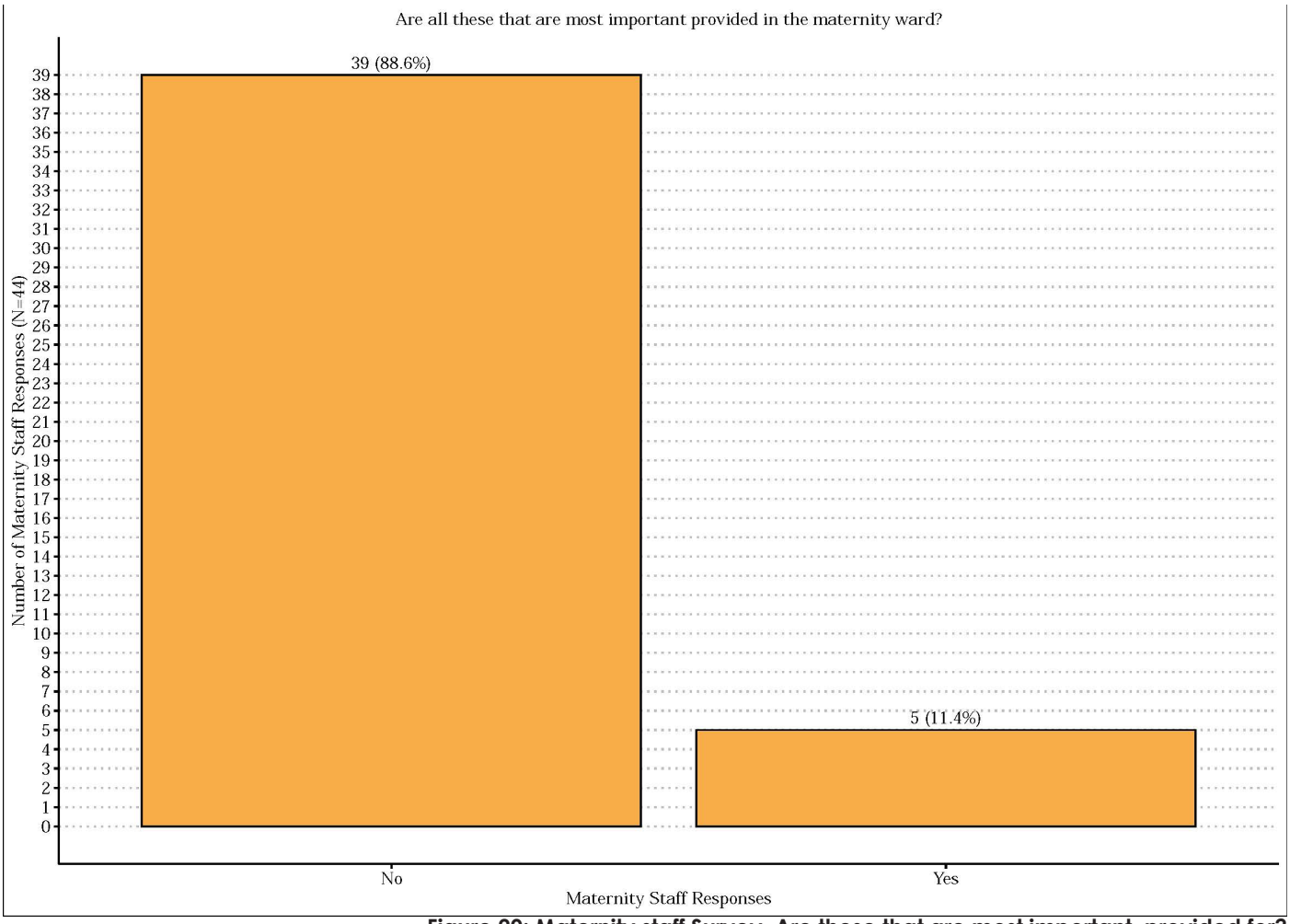


Figure 20: Maternity staff Survey, Are these that are most important, provided for?

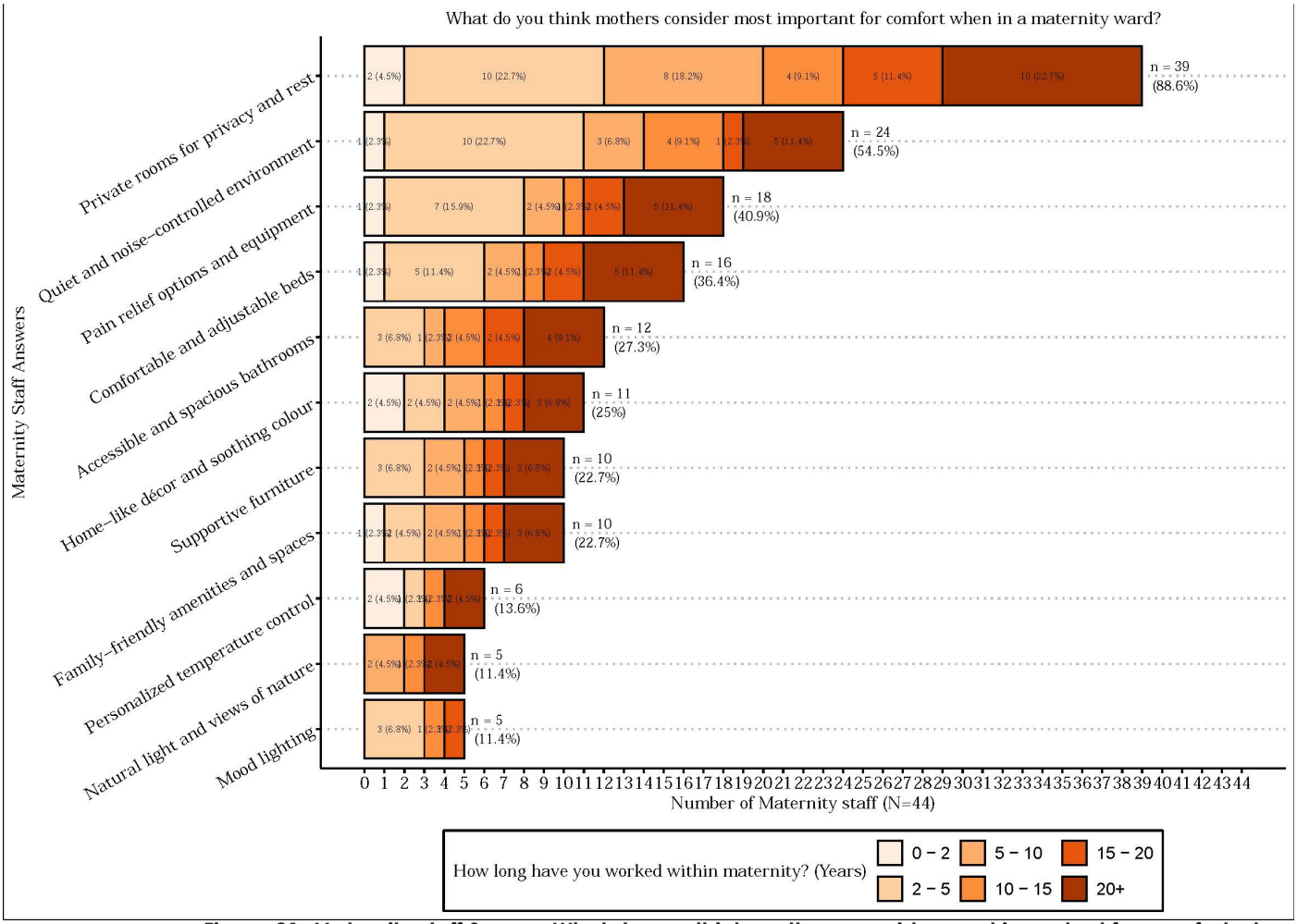


Figure 21: Maternity staff Survey, What do you think mothers consider most important for comfort when in the Maternity ward?

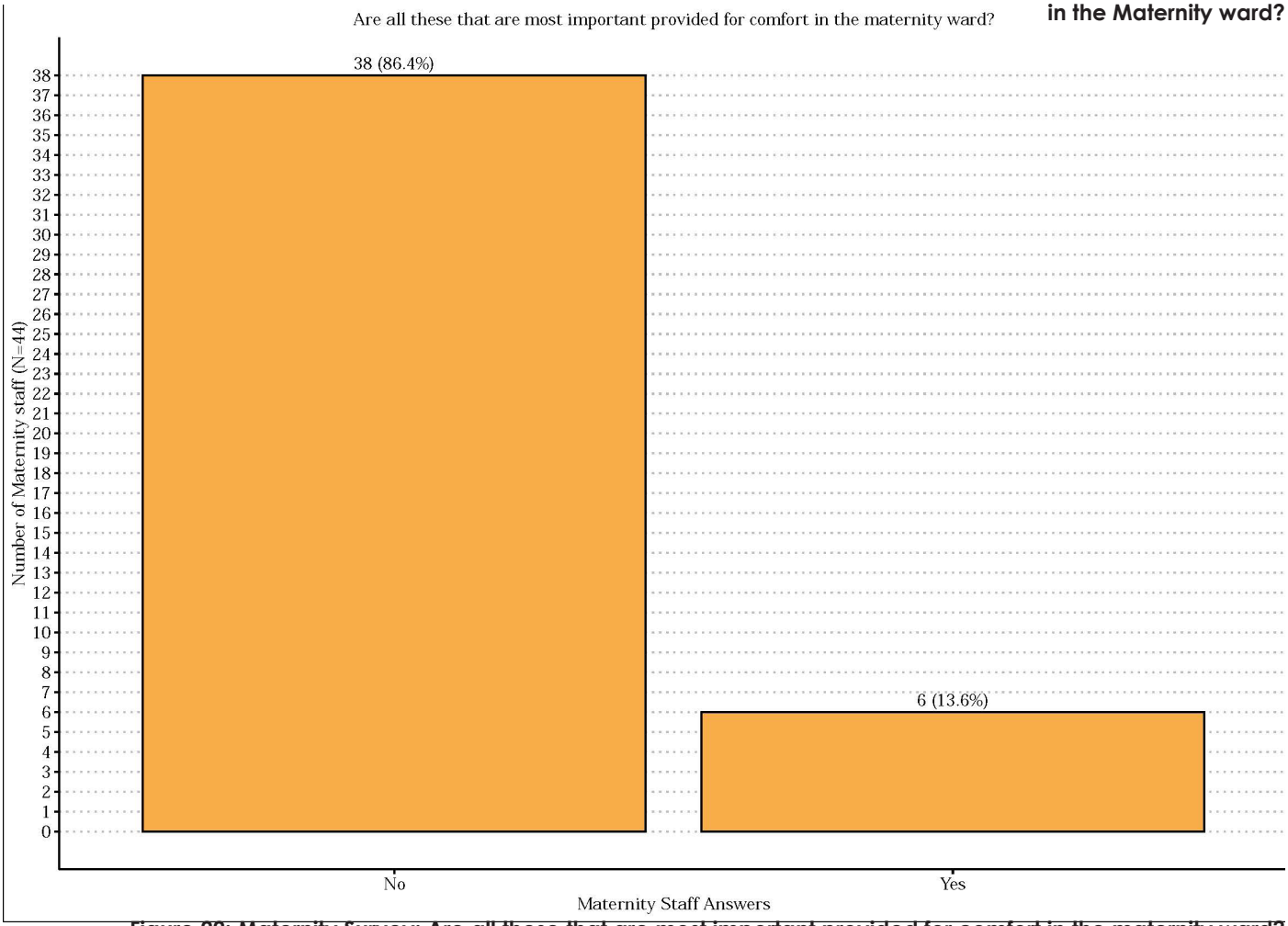


Figure 22: Maternity Survey: Are all these that are most important provided for comfort in the maternity ward?

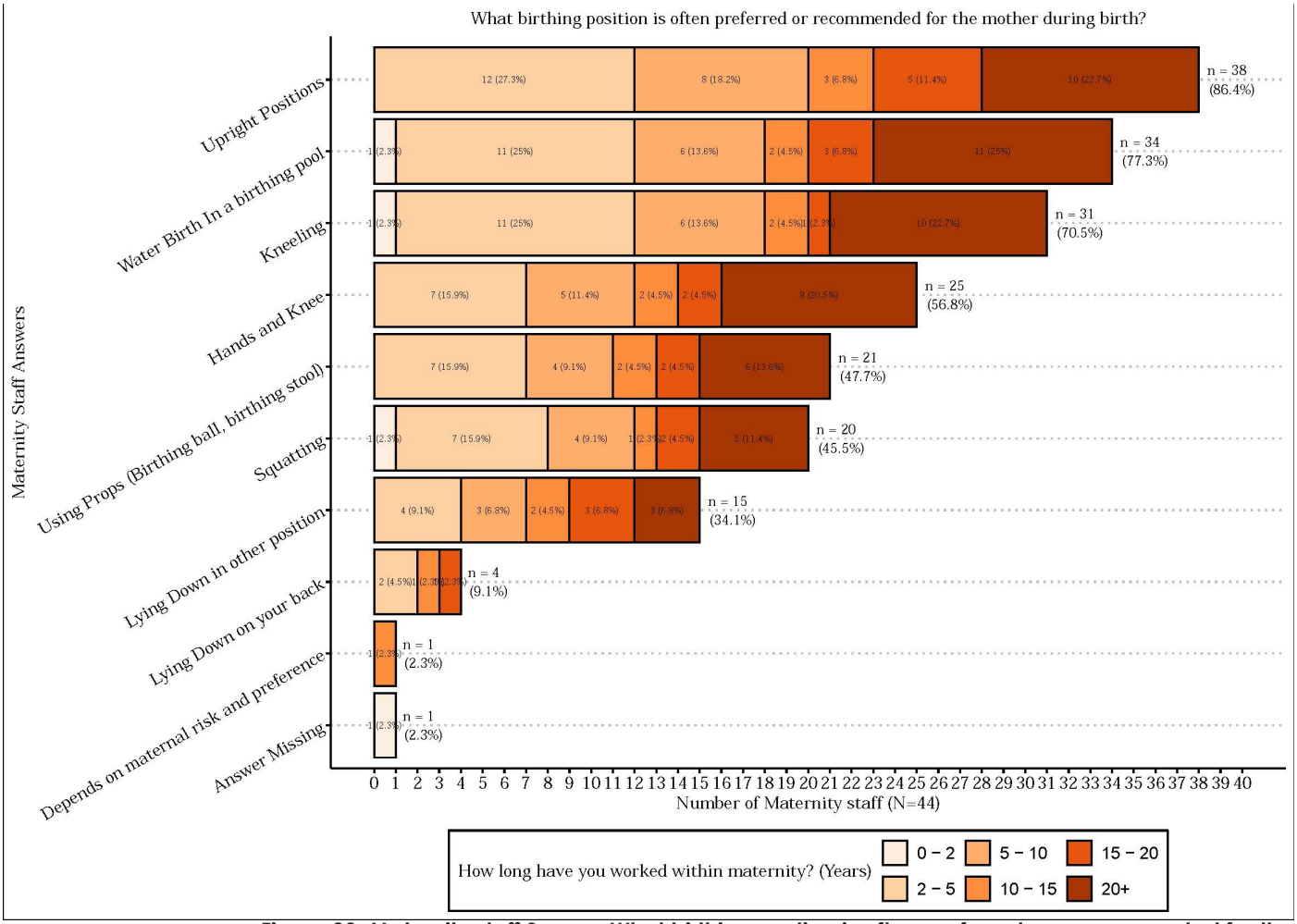


Figure 23: Maternity staff Survey, What birthing postion is often preferred or recommended for the mother during birth?

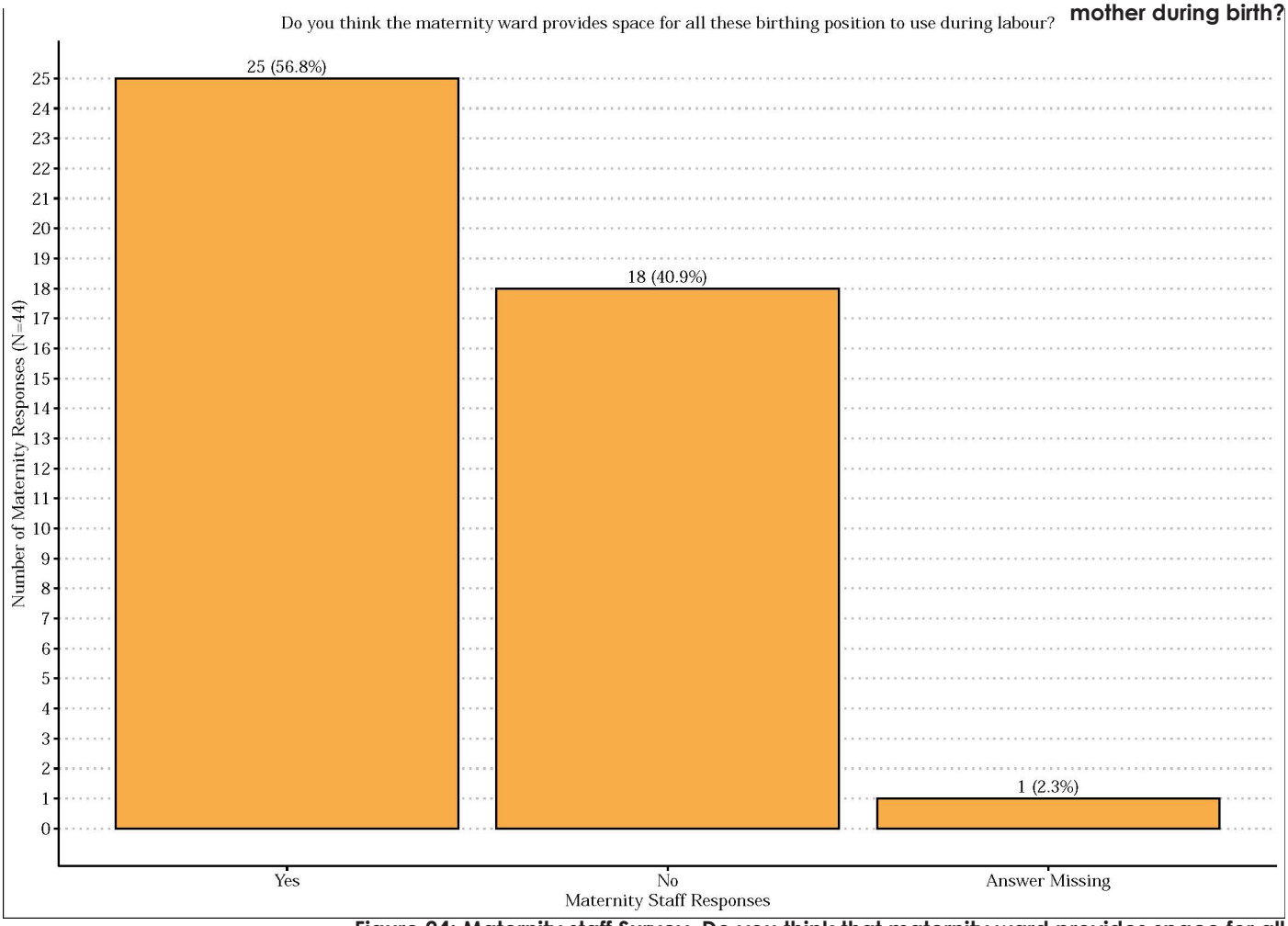


Figure 24: Maternity staff Survey, Do you think that maternity ward provides space for all these birthing position to use during labor?

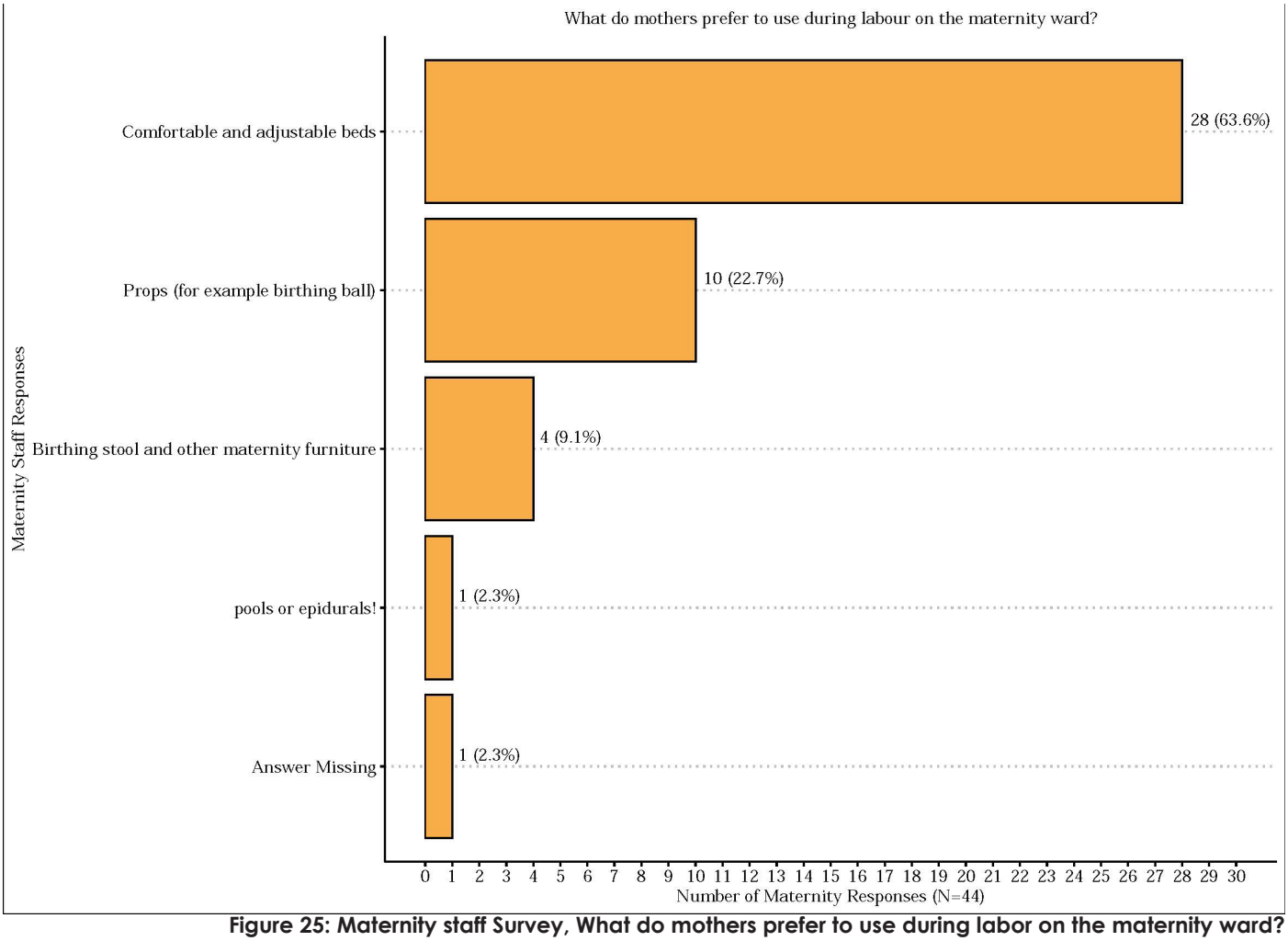


Figure 25: Maternity staff Survey, What do mothers prefer to use during labor on the maternity ward?

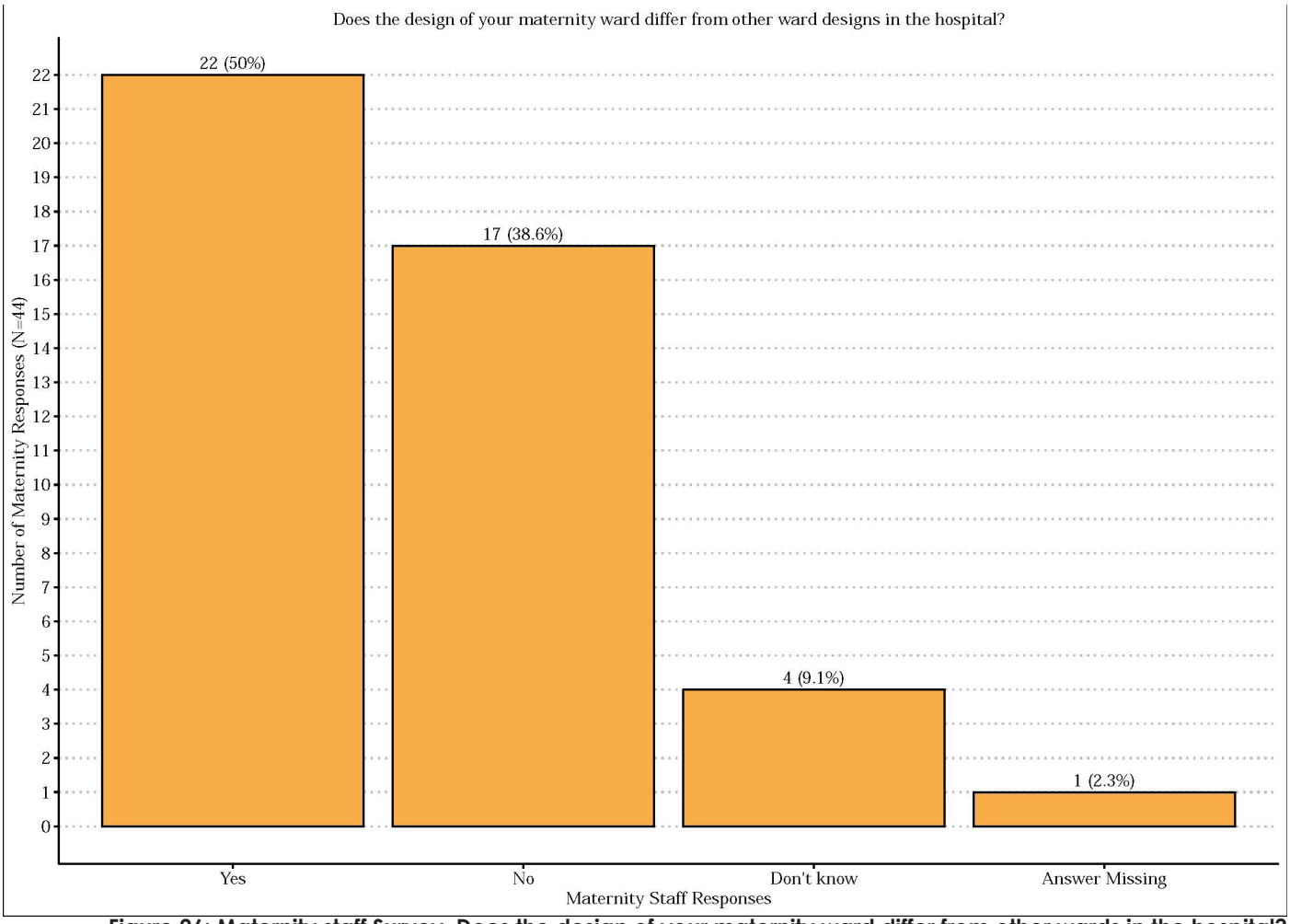


Figure 26: Maternity staff Survey, Does the design of your maternity ward differ from other wards in the hospital?

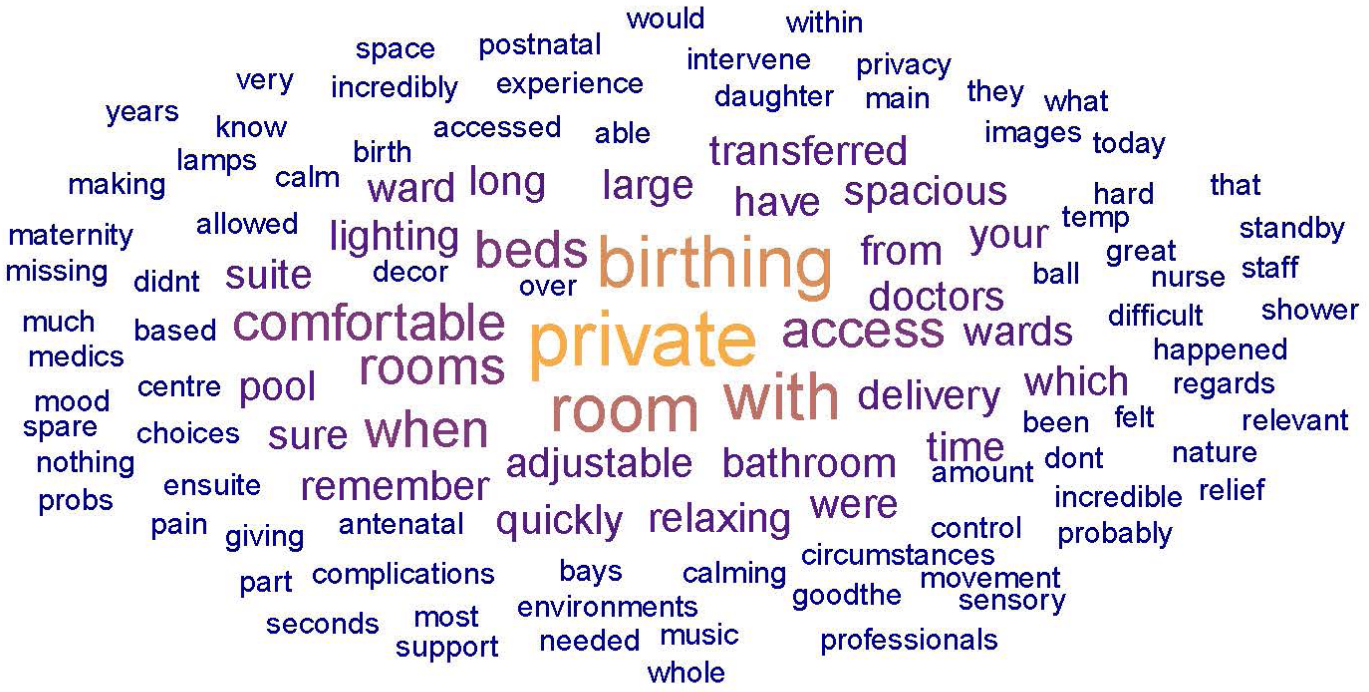


Figure 27: Mothers Survey, What is successful in the maternity ward design?

Figure 28: Maternity staff Survey, What is successful in the maternity ward design?

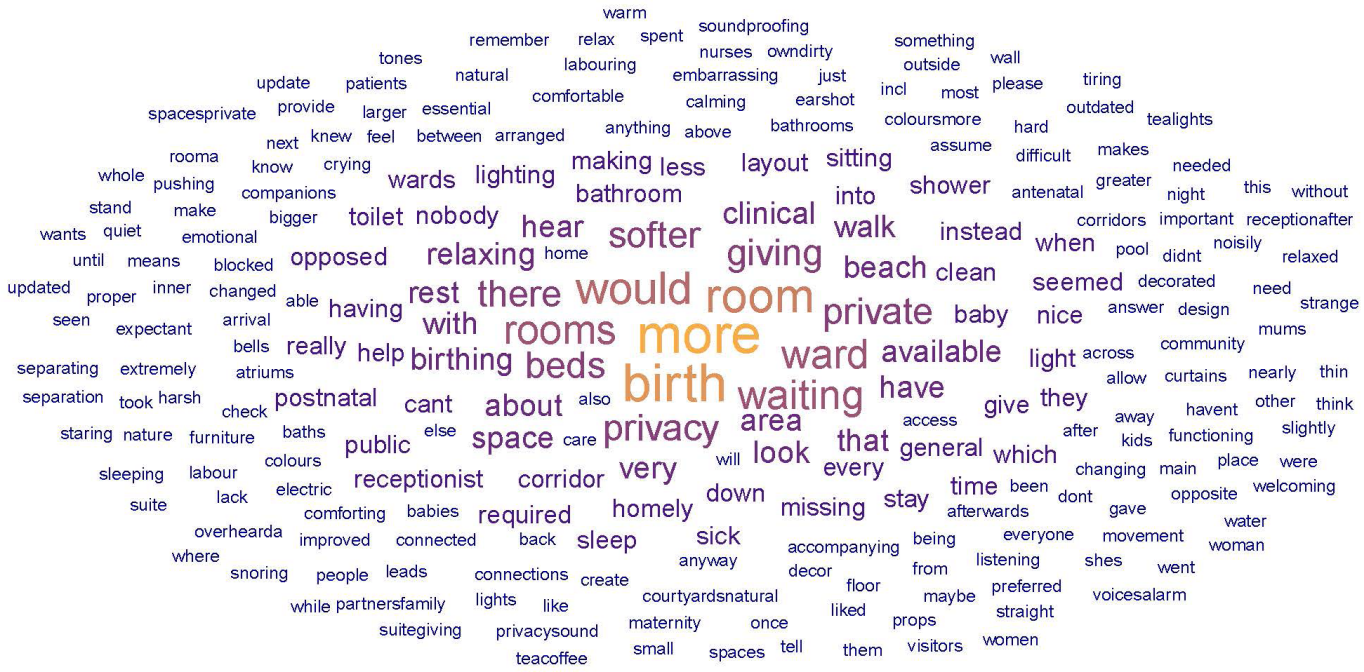


Figure 29: Mothers Survey, What could be improved in the maternity ward design?

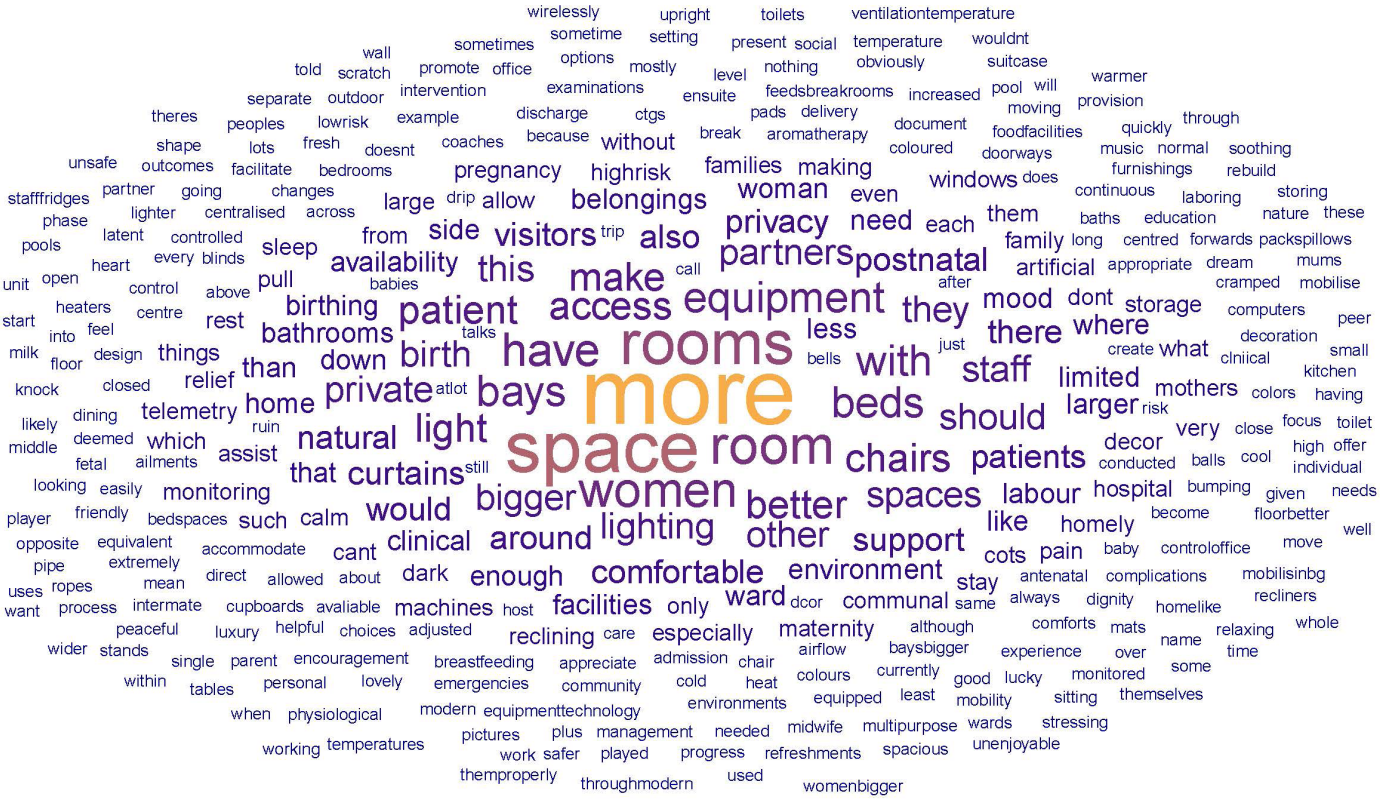


Figure 30: Maternity staff Survey, What could be improved in the maternity ward design?

Chapter 1- Choice

"I had no choice."

Choice, a heavily debated topic when it comes to the women's body, and this doesn't stop when it comes to controlling a women's body during childbirth. Choice covers the topics of birth plans, birthing positions, and birth location.

Mothers were asked if they felt like they had a choice in position, 44% said no, 28% said yes and the other votes accounted for caesareans or unexpected medical interventions (Figure 7). Mums did not feel like they had an expressed choice (72%). The most popular form of birth position was a water birth with 39% of the vote (Figure 9). Only 11% however ended up giving birth in this chosen position(Figure 10). Only 17% mothers gave birth in their chosen position with 79% of mothers ended up giving birth on their backs, a contrast to only 9% of maternity staff who say they recommend, or their patients choose to give birth on their backs (Figure 23).

Providing space for this choice means the maternity ward is designed with all these positions to be possible. Maternity staff, with 57%, said that the ward does provide for all these options (Figure 24). Similarly, 50% of mothers said the maternity ward provided space for all the birthing positions (Figure 13). Maternity staff stated that the ward should improve by providing for "Patient led environment choices" (Appendix B). This is further implied by comments suggesting mothers should be able to control temperature and lighting of the space which is discussed further in the home comforts chapter (Figure 30).

Choice also came into the decision of where to give birth. Home, hospital, and birth centre are the traditional options offered (Figure 2). Reasons women gave for giving birth at home were because hospital was too clinical, or because nothing could replace the comfort of being at home with people you know (Figure 3). However, being a high-risk pregnancy may affect this decision. Due to medical complications, 33% of mothers in this survey commented that they didn't give birth in the location of their choice, this is based on comments made when asked why they gave birth in that location (mothers survey Q3). The alternative of giving birth in a hospital environment was due to safety if anything was to go wrong (Figure 4). The availability of pain relief and medical equipment at the hospital was most important to 61% of mothers, including gas and air (Figure 5).

Comparing these results to change over the years.

Mothers who gave birth in more recent years, felt as though they has more of a choice over the position in which they gave birth. This dropped from 64% to 0% for mothers who gave birth over fifteen years ago (Figure 8). This contradicts the result that showed that only 13% of mothers who gave birth under two years ago, gave birth in the position they wanted, as opposed to the 29% of mothers who gave birth over fifteen years ago (Figure 9&10).

Less mothers nowadays are giving births on their backs, compared to fifteen plus years ago. A drop in results from 100% to 76% (Figure 31). This aligns with the facilities improving to provide for all positions, from 20% twenty years ago to 63% in the last two years (Figure 14).

There was only one response in the mothers survey from a birthing centre, this sample size was too small to draw any meaningful results from. More results from the birthing center was seen from the maternity staffs survey with 14% (Figure 18).

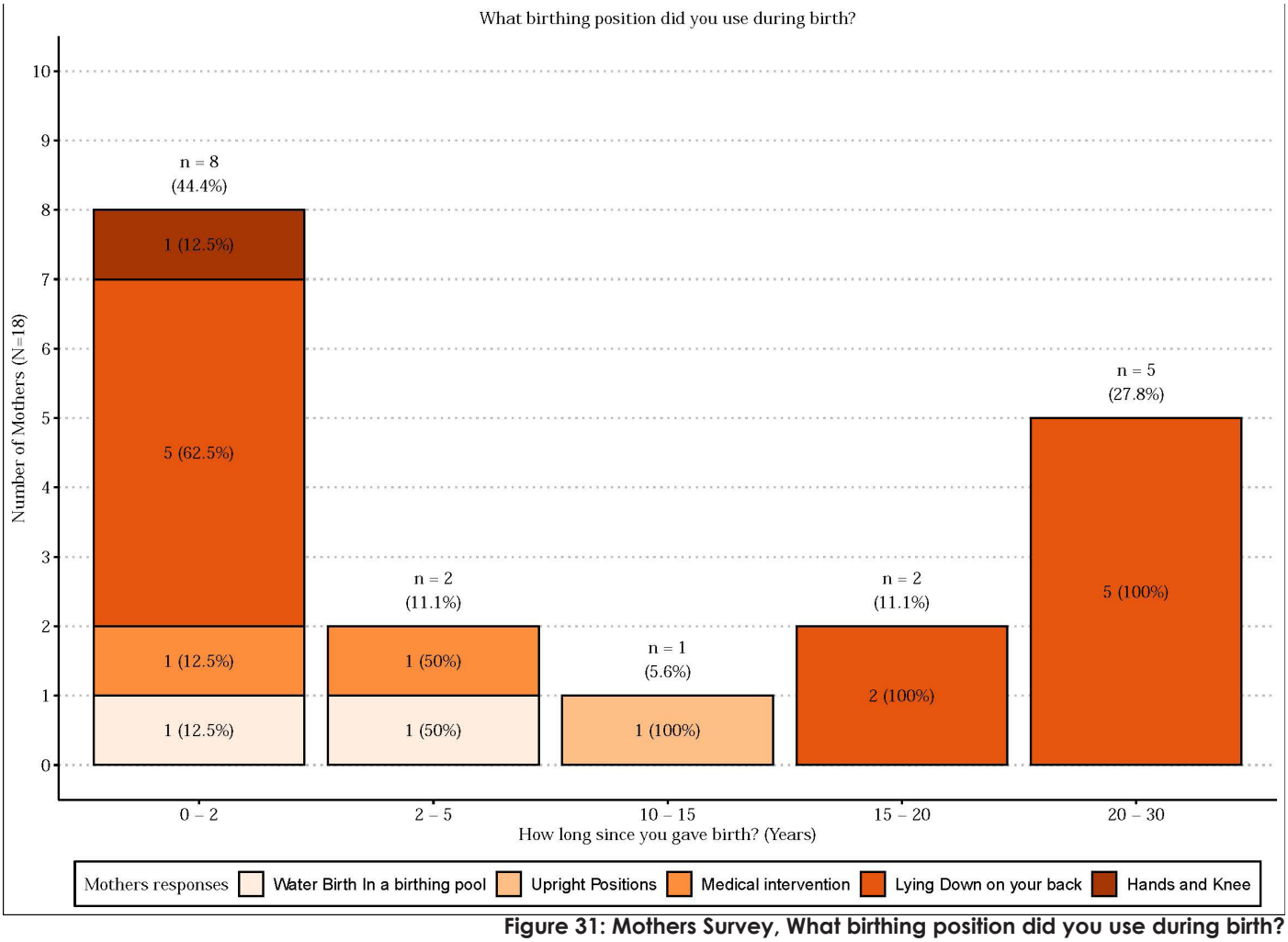


Figure 31: Mothers Survey, What birthing position did you use during birth?

"Privacy was the most important bit for me. Nobody seemed to care about privacy."

In one of the most vulnerable moments in a women's life, privacy should be highly regarded for the safety and comfort of the new mums. This was one of the most talked about necessities through the surveys with 78% of mothers said private rooms were most important (Figure 5). Privacy on the wards was not as popular with midwives for their jobs, 46% of maternity staff voted this most important (Figure 19). Privacy was regarded through noise, space and having amenities, such as showers, close by. On the question of whether all amenities that were considered most important for mothers comfort were provided, maternity staff were more pessimistic, with only 14% saying they did (Figure 22). Comparing this to the mothers results where 44% said they felt the ward catered for their needs (Figure 6). The mothers responses came from different locations to those of the medical staff.

For improvements to the ward, mothers claimed their experience was restless, due to hearing others, and at the same time, embarrassing as they knew visitors and others on the ward could hear them during a vulnerable time. Wanting to rest and get some sleep, mothers were disturbed by snoring, labour noises and babies crying. One commented this was the case even on four bed wards. Quiet and noise-controlled spaces were important in the ward according to 33% of mothers (Figure 5), making it top three for what was important for mothers. Soundproofing was successful in some peoples experience as "many women were terrified by the screams of neighbouring women next door." (Appendix D).

This contrasted with the maternity ward staff, who for their jobs, voted noise control and soundproofing measures as the least important, 27%, as they require to hear when a mother needs help and it's easier to keep track of patients and monitor many at once (Figure 19). In the UK, a registered nurse can look after up to eight patients at once (Royal College London, 2010). However, the maternity staff had an understanding and 55% recognised that patients would want noise control (Figure 21). A suggestion for improvement could be voice and noise alarms, controlled by the mothers when needed, so that soundproofing can be implemented (Appendix D). Waiting rooms often provide space for visitors to wait, however this also means more ears listening into the mother's private moment.

Privacy within reception area, as well as privacy by moving the wards away from main corridors should be considered when designing a maternity ward. A comment from a mother suggested a "Quiet area where you can walk up and down, if need be, as opposed to having to walk up and down corridor outside birthing rooms listening to mums giving birth." One mother having been ill and had an unexpected birth, remembers:

"I had to go back to the receptionist in the public space and tell her about the sick, in earshot of waiting room"

The process of birth is known to be a messy one, but this further shows the need for private, noise-controlled spaces.

Maternity staff survey further implied by three staff members that the successes of their wards included the use of a centralised office for maternity staff, with "large bays where we can see the women ('patients') and they can see me/us" (Appendix A). It was suggested that all wards should be on one floor too, for ease of attending to patients and emergencies.

Birthing centres however, had large private rooms with en suites, which reduced the need to walk through corridors to shower after giving birth, and this was praised by those who had used the spaces. Other mothers also praised their en suite, private rooms attached to the labour room (Figure 32). However, facilities for some were shared, not attached to rooms or not up to date. On reflection of the survey, an additional answer for 'what's important to the comfort of mothers?' should be "clean/hygienic up to date and working en suites" as added by a mother (Appendix C). Providing this answer as an option might help to reflect now on percentage that think this is important. In their comments, 33.3% mentioned bathrooms on both successes and improvements (Mothers Survey Q13 &14).

Figure 32: Mothers Survey, What was sucessful in the current maternity design?

How has mothers experiences changed over time?

Overall, privacy was the most important for mothers, however this varied due to how long ago they gave birth and the conditions of the place they birthed in.

For mothers who gave birth up to fifteen years ago, they said that privacy and noise control was most important to them. After fifteen years, this drops to 50%, with consideration for a smaller sample size for this age group, of two (Figure 33). Mothers who experienced the maternity ward over twenty years ago said it was hard to remember the maternity ward space. However 80% still said privacy was most important for them (Figure 33). In this age group, 20% of the mums, said privacy on the wards was the main improvement they had for the ward that they remembered (Appendix D).

Where they gave birth also impacted the results of the survey. Those in the birthing centres found the rooms to be more private and had en suites attached. Improvements to privacy and noise regulated spaces were mentioned by 33% of mothers (Mothers survey Q 14). One mentioned the inclusion of quiet corridors for walking and calming, away from the main corridor and noises of other mothers. Those who stayed in birthing centres said more private rooms should be made available, as this was successful.

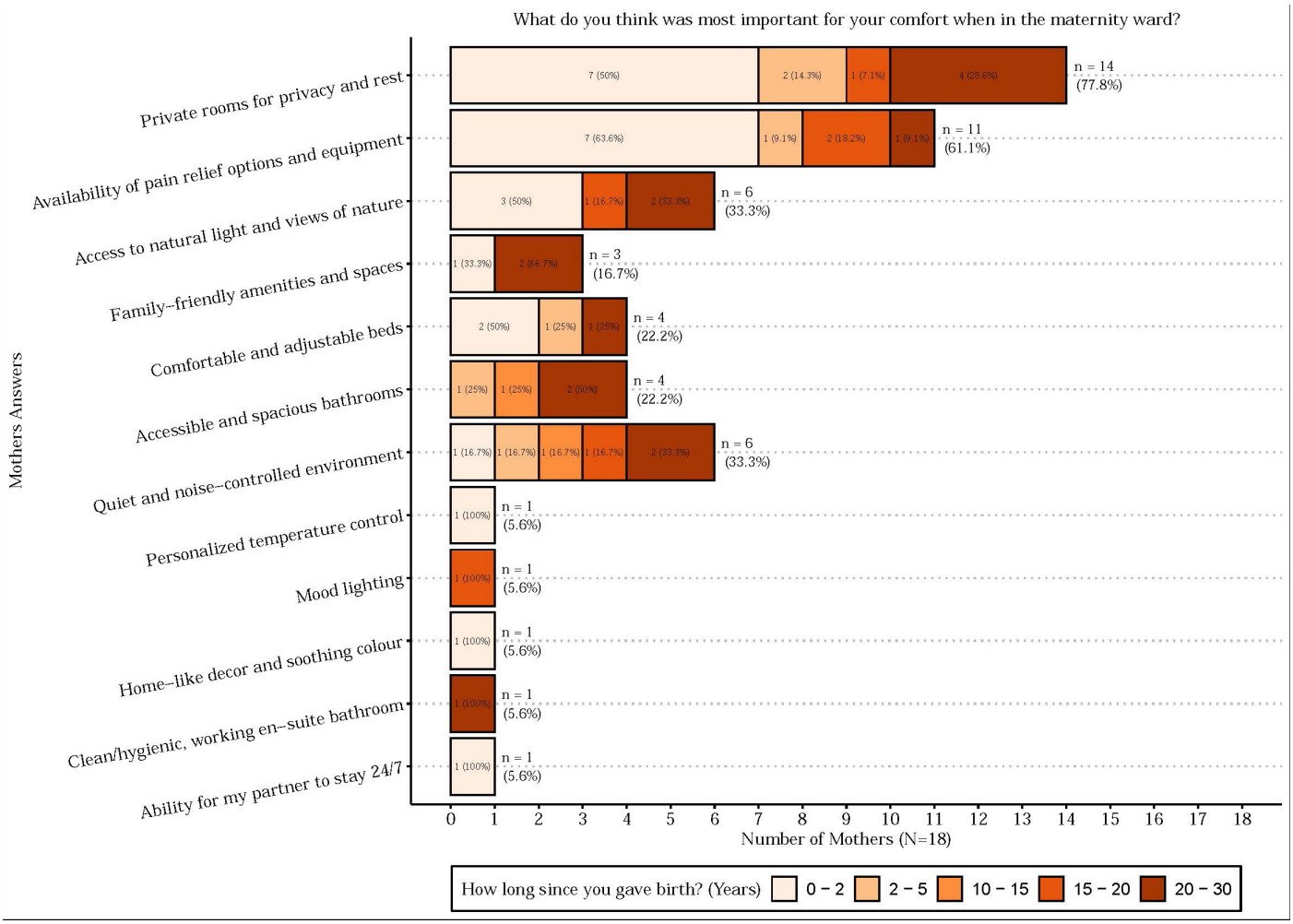


Figure 33: Mothers Survey, What do you think was most important for comfort when on the Maternity ward?

How do maternity staffs years of experience affect the results?

Overall, 89% of maternity staff said that the maternity ward does not provide the facilities required for their jobs (Figure 20), this includes private rooms and noise controlled spaces. These amenities were ranked in the bottom five results for most important for maternity staffs ease of job. Furthermore, results showed limited variation depending on the years of experience the maternity staff had (Figure 34). Those with over twenty years' experience, said the success of spaces they have worked in were the inclusion of private rooms and most commonly mentioned more private spaces were needed as an improvement (Maternity Staff survey Q 12).

A trend was seen that those who worked in birthing centres would answer yes to their facilities providing for work, comfort and birthing positions. Those who worked in birthing centres added the success of their space was due to the private rooms available to mothers. This matches the results from the mothers survey.

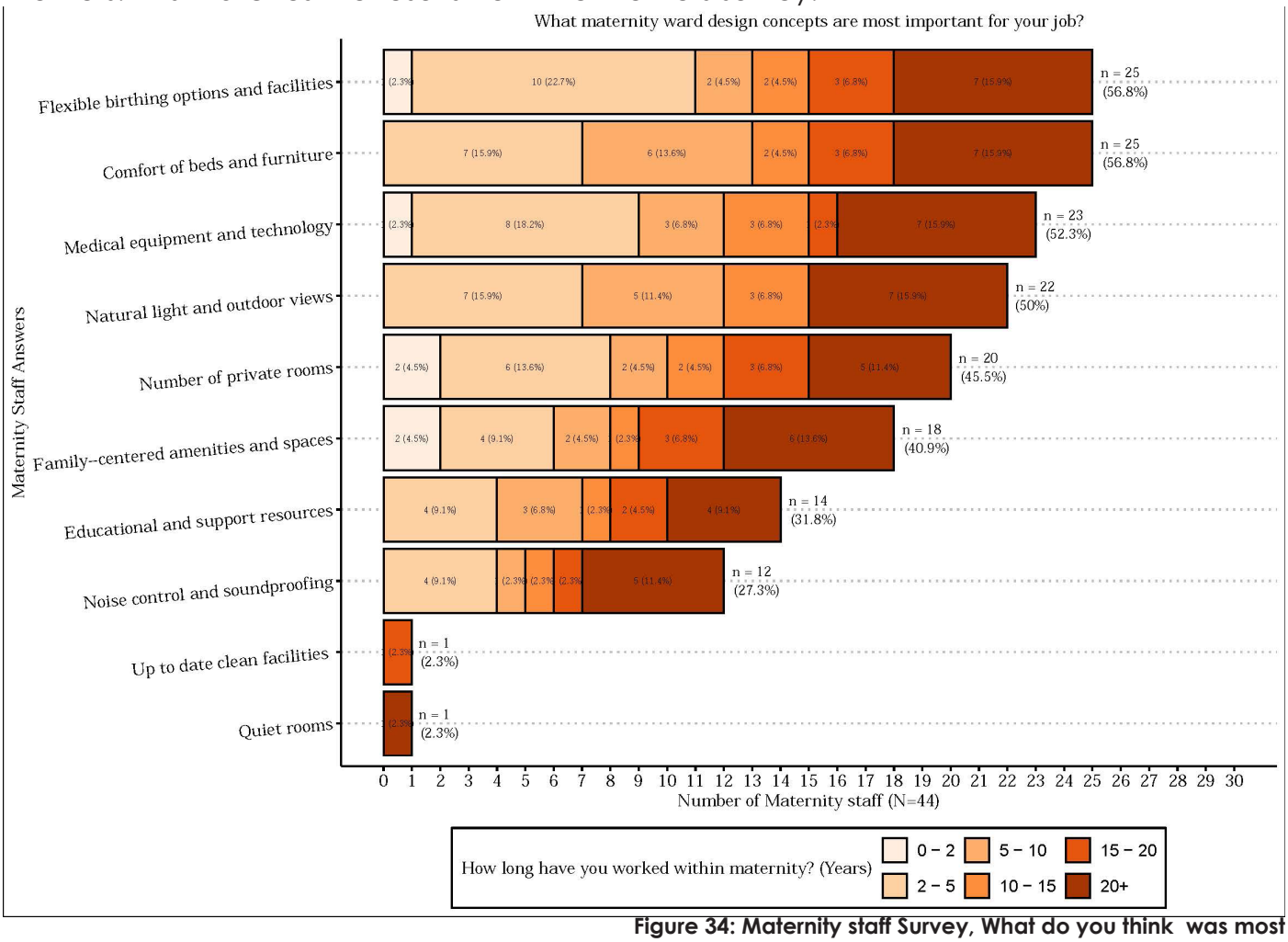


Figure 34: Maternity staff Survey, What do you think was most important for your job on the Maternity ward?

"Just because a woman is deemed 'high-risk' in pregnancy, doesn't mean she wouldn't appreciate the same home comforts"

The decoration of the maternity ward includes the lighting, aesthetics, and furniture. This all contributes to the comfort of the mother and the connection they have to the feeling of home and safety.

From my survey, the following categories refer to home comforts:
- Family centred amenities
- Natural lighting and views of the outdoors
- Comfortable beds
- Home décor and soothing colours
- Temperature control
- Supportive furniture
- Accessible bathrooms
- Mood lighting

Maternity staff said for the ease of their jobs, family centred amenities (41%), natural lighting and outdoor views (50%) and comfortable beds (57%) was most important (Figure 19). This result had a larger variety of responses when asked what they think is important for mothers comfort (Figure 21). This larger variety of response was also seen in the mothers results (Figure 5). The most common responses among mothers were natural lighting (33%) and accessible bathrooms (28%). This shows a significant difference in result for lighting between maternity staff and mothers (Figure 21 vs 5).

Lighting can be split into two, natural lighting and views and artificial lighting. Mothers results show that 33% said natural lighting and views were important for them, 6% wanted mood lighting (Figure 5). This was more than the 11% of maternity staff who said their mothers prioritised natural lighting for comfort (Figure 21). A similar result to the mothers survey of 11% was said for mood lighting. In contrast, 50% of maternity staff said that natural lighting was important for their job, understandable for reducing trip hazards, ease of job and energy levels. Comments on successes in the ward, as spoken about by 11% of mothers, included the use of sensory lamps, controls to the lighting, as well as the birthing pool suite included mood lighting with the addition of music (Mothers Survey Q13). To improve, 20% of maternity staff and 39% of mothers talked about lighting, some mentioned the room lighting was too harsh and therefore they used tea-lights to calm the space or required softer lighting(Mothers survey Q14). In addition to including more natural lighting in the birthing rooms, reducing the number of corridors and replacing them with atriums and views to the outside so natural lighting can be used, will help the space feel more calming and welcoming to mothers and their visitors (Mothers survey Q14).

Family centred amenities improves the families experience during healthcare (Family-Centered Care, 2025). This is another common result for ease of job. Nearly half as many staff voted this as important for the mothers comfort, reducing the vote from 41% to 23% (Figures 19 vs 21), which is further implied by the 48% of maternity staff who commented on family centred amenities such as more space (Maternity staff survey Q13 &14), family furniture and beds and visitors facilities. A comment stated:

"postnatal ward needs better family centred space availability for support partners to stay"

Some mothers agreed with the maternity staff, 22% voting for this (Figure 5). To make the maternity spaces more family orientated, mothers suggested the inclusion of "Tea/coffee making area for partners/family accompanying Mum to be"(Mothers Survey Q14), would further help the visitors who are essential for the mothers comfort during this time. Larger room sizes, as mentioned by 22% of mothers, would allow more space for visitors to walk around, as well as additional beds/ softer furniture for supporting guests to stay by the mothers side. Softer furniture would also be seen as more visually appealing the mothers, and therefore add to the calming home décor (Mothers Survey Q14).

Home décor and soothing colour was voted by 25% of staff as important for mothers comfort (Figure 21). As opposed to the 6% of mothers who voted for this. However multiple comments for improvement by both maternity staff and mothers, included the negative opinion on the clinical décor, or in some cases, the out of touch decoration for a maternity ward. From the mothers survey, 39% of comments about improvements were based on the décor (Mothers Survey Q14). One mother commented:

"I spent the whole of my labour staring at a wall of a beach which to me was not relaxing, as I don't really like the beach. It seemed strange to assume that every labouring woman wants to be on the beach when she's pushing out a baby! I would have liked to have seen more calming colours and tones."

On contradiction the use of nature in the design was seen as a success for some mums as it was a calming decor (Mothers Survey Q13), with others saying they'd love to see more of this to reduce the clinical feel of the hospital rooms. The term clinical was used as the reasoning why mothers chose home births over maternity wards, and was used by 22% of mothers as a means for improvement (Mothers Survey Q14).

Bathrooms was a common comment for both successes and improvements in the ward (Mothers Survey Q13&14, Appendix C&D), with 28% of mothers mentioning this. Those with private en suites saw this as a success of the space, whilst other noted that the shared bathrooms, often across corridors from where they were recovering, were not clean or hygienic. One commented:

"I had to walk across a public corridor after giving birth. The shower was so blocked, I had to stand in my own dirty water."

For the benefit of the mothers comfort, 27% of maternity staff said that accessible bathrooms was required (Figure 21). This aligns with the 28% of mothers who said it was most important for them (Figure 5).

The question "What is most successful in the maternity ward", multiple response exclaimed "nothing" or "Nil". These answers, although short, give an insight into some of the frustration of the staff on the wards. Another common response was "good, moveable beds with more function". For maternity staff, for both ease of their job and the mothers comfort, comfortable beds was most important, 57% of staff voted this for their jobs (Figure 19) and 36% for the mothers comfort (Figure 21), compared to 22% of mothers who choose comfort of beds (Figure 5). The use of supportive furniture was introduced when talking about mothers comfort, 23% of maternity staff voting this as important. Maternity staff stated in the comments for improvements that the rooms to allow space for all maternity furniture, props and options for the mother to choose, if they do not wish to use the bed. The use of comfortable beds, however, was most used and preferred furniture choice, with 67% of mothers saying they used this (Figure 15) which was agreed by 64% of maternity staff (Figure 25), this is more than the result to those who said it was most important for their comfort. Birthing pools was second choice, with 17% of mothers choosing this, these mothers were the ones who had water-births. The availability of birthing pools in the facilities was a success commented on by maternity staff (Maternity staff Survey Q11).

Maternity staff years of experience didn't affect the results for what is important for their job or mothers comfort, as all results were consistent with the averages. No trends were shown over the years of which mothers gave birth.

Figure 35: Maternity staff Survey, What improvements would you make to the design of the maternity ward?

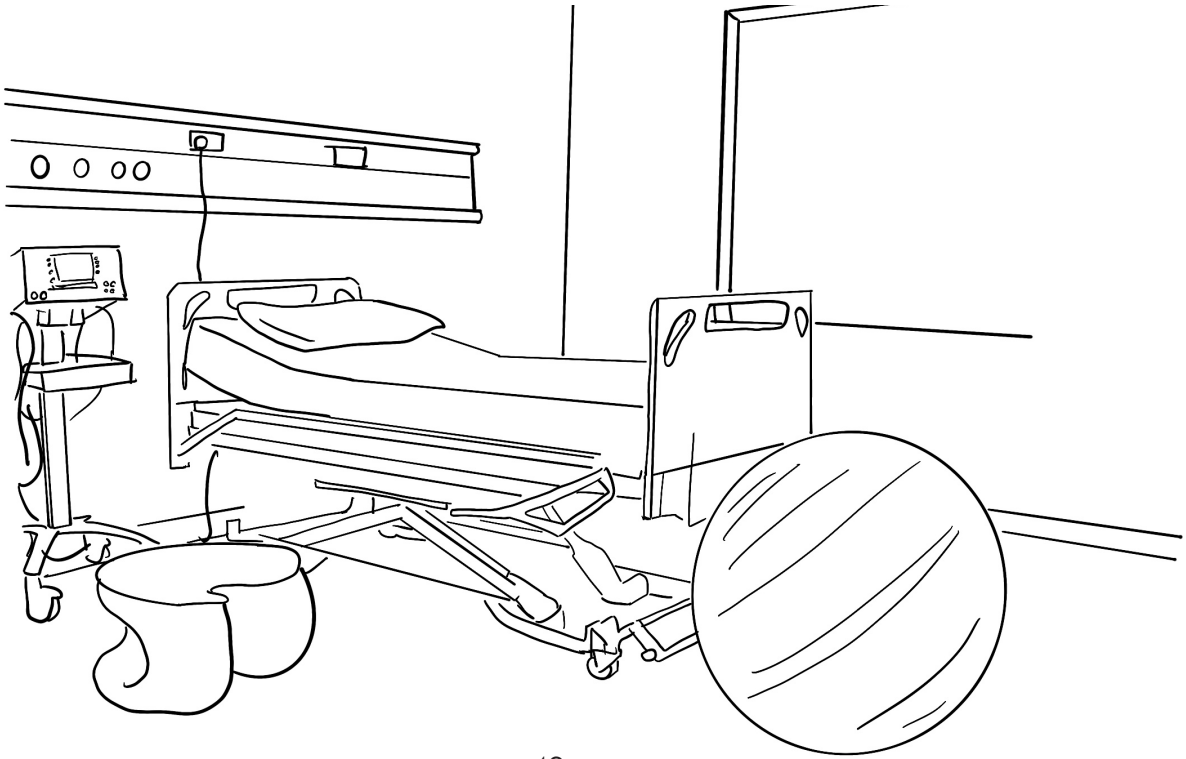
Conclusion of Results

These overall results have shown that birthing centres had more positive results from both midwives and mothers, even with a smaller sample size. Additionally they showed that maternity wards do not provide the amenities needed to allow maternity staff to complete their jobs with ease. Results from the mothers survey showed that mothers who gave birth over twenty years ago had less conclusive data due to memory.

Choice is relevant to multiple areas of the birthing process. For choice over position, only two thirds of mothers in recent years felt like they had a choice in which position they used, which is an improvement compared to those over fifteen years ago. There is a reduction in mothers giving births on their back compared to twenty years ago. However, the percentage of mothers in the last two years who gave birth on their backs is higher than mothers had chosen or maternity staff recommended. Medical interventions and precautions was the main reason for mothers not being able to give birth in the position or locations of their choice. Control and flexibility of the space will allow mothers to have more choice over their birth, which in turn will help the maternity staff provide a safe and positive birthing experience.

Private rooms and private bathrooms were important to mothers. There is a recognition from maternity staff that private rooms are needed. However these should also be close to the central nursing station for quick intervention. Bathrooms with clean and hygienic facilities, close to the maternity bay was successful for those who had access to this, with mothers in shared bays asking for more private bathrooms.

Decoration of the suite can effect the outlook on the birthing experience for mothers. More mothers wanted natural lighting then maternity staff predicted. Natural lighting is important for maternity staff and their ability to do their job. Maternity wards should be designed with family amenities in mind, to allow support from partners and visitors. This includes increasing the size of bays. Comfortable beds for rest and recovery was important for mothers, and maternity staff praised the use of these for flexibility of function and to provide ease to their jobs.



Have any changes been made for women and advancements of medical knowledge within maternity ward design?

This discussion explains the results of the surveys, whilst understanding if there has been any change for women or for newer medical knowledge within the design of the ward. Comparison will also be made with an earlier survey, 1974 New Yale, as discussed in the literature review (page 11). The survey responses showed trends in the themes of privacy, home comforts and choice which will be further evaluated in this section. The survey of the maternity staff, suggests the maternity ward is not designed for the comfort of mothers (86%), with a lower percentage of 50% of mothers who thought the space wasn't designed for them. This difference could be explained by sample size (see page 16), maternity staff base their opinion based on daily experience and treating multiple mothers, whereas the surveys sample of mothers is smaller, and mothers have a limited experience of the space.

For the majority of mothers, privacy was most important however there is a difference in preference for the use of private room between mothers and maternity staff, and this links also to the use of noise-controlled spaces or sound proofing. Maternity staff had less preference to use sound proofing for their jobs as it helps to be able to hear multiple patients in order to monitor them. However maternity staff with more experience, had a higher recognition that patients require private rooms.

Noise was also mentioned by mothers in relation to the waiting rooms, which are often linked to the wards and within earshot of the birthing bays. This means visitors and families are able to hear mothers. Waiting mothers who are likely terrified as it is, were hearing what is yet to come of their experience. The waiting rooms are used for family, instead of being in the room or in a separate waiting area to those who are there for medical assistance. This increases the need for family amenities.

Mothers have a greater variation of opinions when it comes to what it prioritised for their comfort, as can be supported by the maternity's staff answers. When it comes to the staff, what was required for their jobs with regards to home comforts, they were more concise, with a consistent top three options. This is reflective that for their jobs, as medical specialists for intervention, requires less decoration and care for paint colour. The needs are practical, natural light for visibility, flexible furniture to move easily and tailor to mothers, and family amenities to provide space away from the birthing space. This is to look after family, so more people can move around the mother without tripping over each other, as well as having a partner stay after the birth to help look after the mothers in recovery.

Mothers however, required amenities that would increase positive mental health and well-being. These things would be linked to their homes or biophilic links, such as lighting and decoration, family amenities, and comfortable soft furniture. Birth centres are designed to be more homely so mothers are more comfortable and relaxed during the birthing process (NHS Trust, 2024). This is achieved through soft furniture and calming tones. The results showed both were desired, as it reduces from the clinical feel that a hospital ward can display. These opinions were also found in the 1974 Yale study, showing mothers as patients are still asking for these same facilities 50 years later.

Natural lighting and views have associations to biophilic design, the use of nature in design. In medical settings, biophilic design is starting to be implemented more due to the benefits on mental health and well-being, with has a domino effect on patient's recovery. This is based on studies such as the 1984 gall bladder recovery study showed that those with natural views, as opposed to man-built landscapes, recovered quicker (Ulrich 1984). Biophilia is also shown through the use of colours and calming tones within the ward. Many mothers commented on the clinical feel of a hospital, and how the use of natural links or calming tones would be nice.

Allowing for family amenities, from the mother's point of view, would mean their partner or family could stay close to them for support and help. This raised the question; what is important for the mother that isn't directly linked to design, but could be designed for? This question would be used as a control measure in the survey, or to further links from the answers given. A control answer used in this survey was 'availability of pain relief options', which was a popular answer as expected, however would friends and family be as or more popular than this for ensuring comfort in mothers, as this would further the link to home away from the medical side. The reasoning why we have little family amenities can once again be linked to the history of hospital design, where the mothers would be separated from their partners when they got to the hospital, and the male doctor was the only male authority figure present in the room.

Comfortable beds with flexibility to be adjusted and moved, was most important in home comfort needs for both mothers and maternity staff. Beds that can move and adjust so the maternity staff are able to position their patients around the required machines, or in positions that would help with the medical intervention improves the ability for staff to do their jobs. Comfortable beds for mothers help with rest and recovery. A trend could be seen that the furniture or props most important to the mothers was directly linked to the position in which they gave birth. As most women gave birth on their backs, beds was the most popular choice. Those who had water births, stated that the pools were most important, and those who gave birth upright opted for the birthing ball. Therefore, if more women gave birth in their initial chosen position, would the results for this be different?

As there was no trend in the years since giving birth, this suggests there has been no improvement in providing home comforts in maternity wards over the past twenty years. The same reasons for choosing not to give birth in hospital over twenty years ago, still apply to those giving birth today.

Increasing the availability of choice for mothers is supposed to be helped by the introduction of a birthing plans, which were not mentioned in my survey. Birthing plans are made by birthing parents, in consultation with the midwife or doctor. This lays out a plan of decision that need to be made during labour, so the consultant is aware of the choices made. Things included in this document include location of birth, people they wish to be present, birthing equipment they want available and medical procedures they would like access to or to avoid, to name a few of the many decisions to make. This allows the birth to run smoother without the mothers making decisions whilst in the moment. Recognition that this plan could change if circumstances change and emergency intervention is required, as well as amendments may be put in place which alters the choice of the mother if they are classified as a high-risk pregnancy. A high-risk pregnancy can be due to lifestyle choices, age, or health related conditions pre and during the pregnancy. This occurs in 6-8% of pregnancies (Sankaran, 2025). However, as shown by the survey results, choice in position and location weren't being followed.

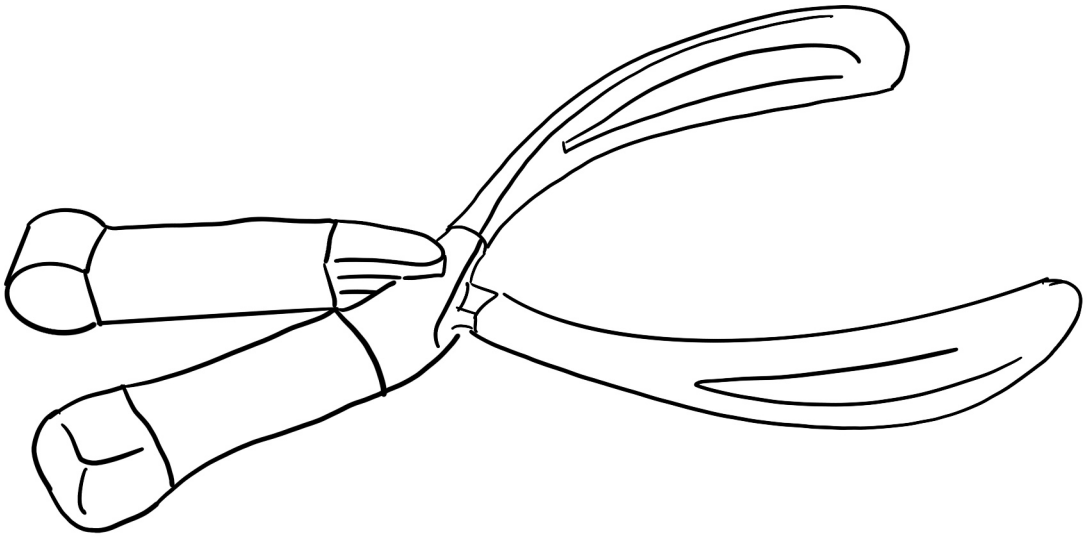
A NHS maternity care policy, better births 2016, noted that mothers were not giving birth in the location of their choice “49% of women preferred to give birth in an AMU (birthing centre) but only 9% actually did so, and whilst only 25% of women would choose to give birth in a labour ward, 87% of women did so” (Clancy, Boardman and Rees, 2024). This was also seen in the survey’s results, with the most conclusive results being from those in the last two years, suggesting we have not progressed in the last eight years since the better birth report was made. This also suggests we should be designing the maternity ward for mothers like we design birthing centres, as the primary location that mothers give birth in, instead of designing a secondary location that fulfils the mothers needs but is rarely used in comparison to the hospital ward.

The NHS recommends the use of birthing centres, as a maternity led unit that is more comfortable than hospital bays, for multiple positive benefits such as higher satisfaction, more straight forward births and lower complications during birth, with medical support on standby if needed (The Birthing Centre, 2025).

Birthing Centres:

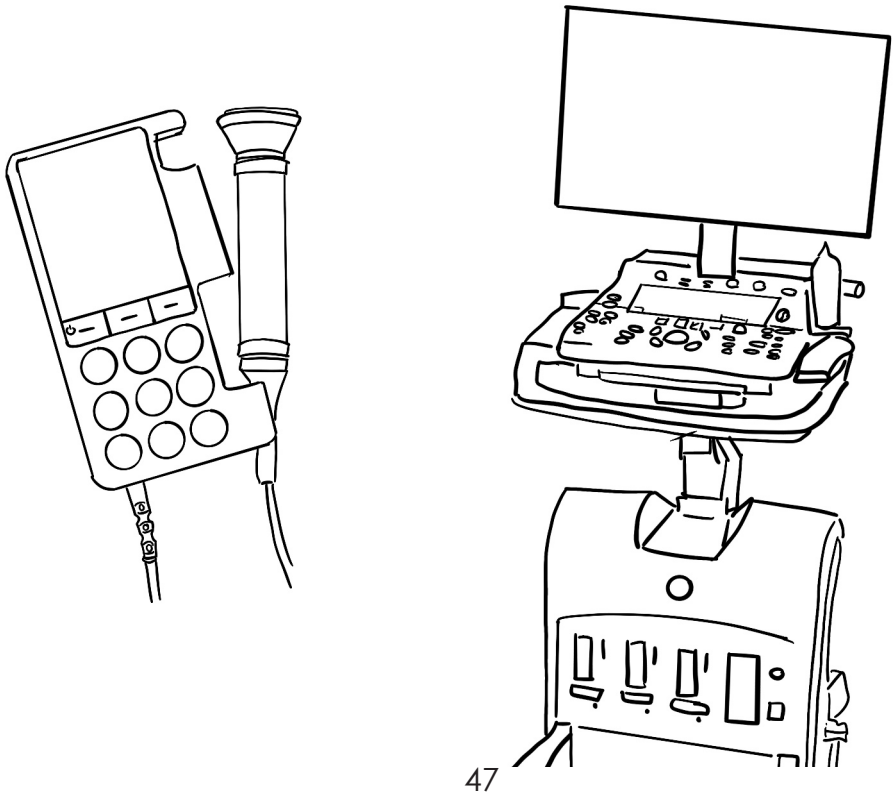
The results showed birthing centres to have more positive results overall. The results suggest the space is designed for mothers. The birth centre network was established in 2000 with 90 birthing centres and later dissolved in 2011 and all birthing centres are now managed by the NHS. (House of Commons, 2003). The birth centre network hopes to improve facilities for mothers and families “by ensuring that modern maternity care includes the provision of birth centres as real choice for women." Often attached to community hospitals as part of the NHS, the aim for birthing centres is to provide a service with more options so mothers can make an informed choice.

More birthing options are available at a birthing centre, such as water births and the use of props. This correlates with the results that should those in birthing centres did feel like they had a choice over the position in which they gave birth. The results showed an improvement in mothers feeling like they had a choice over their birthing position, an improvement taking effect after birthing centres were established. However, due to the majority of the results from mothers, being those who gave birth in maternity ward, the number of mothers who feel like they have a choice is still significantly low. 67% of mothers who were surveyed, ended up giving birth on their backs. This birthing position can be linked back to when men first intervened in the birthing process from the 17th century. Maternity staff represented an understanding that this is not the most popular choice of birthing position, but also regarded that space, flexibility of the room and a larger variety of birthing furniture would allow for mothers to have more options in giving birth. Although comfortable beds were seen as most popular by both staff and mothers, this also aligned with the mothers who had given birth on their backs and therefore an appreciation that comfortable beds would lead to higher satisfaction in this position, as well as being needed in the rest and recovery post-partum.



This redesign of birthing centres compared to maternity wards, further iterates that maternity wards aren't designed for mothers, but rather meant for medical intervention and therefore intended for the medical staff to be able to perform their jobs to the best ability. However as proven by the survey, the hospital does not do this, as maternity staff do not feel the ward provides all amenities for their jobs. If the maternity ward isn't designed for mothers, and isn't designed for maternity staffs' job, who is it designed for?

Referring to the literature review, the maternity ward design came about from the ease of clinicians, which was a male dominated environment at that time (Weisman, 1992). When forceps, a tool that is only used for assistance if medically necessary these days (Forceps or vacuum delivery, 2020), were invented, male doctors took over the birthing process. The survey showed the maternity ward has not been updated to deal with modern medical intervention, machines and techniques, opting instead to take the form of a delivery ward as seen in the 1950's, which was dominated by 97% male hospital consultants (Wright, 2022).



Conclusion

Who is the maternity ward designed for?

Why are the maternity wards designed the way they are?

The maternity ward was designed based on male influence (see page 8, literature review). After years of the birthing process being undocumented as men weren't allowed in the room, the introduction of forceps meant male doctors took over the medical practice of maternity. Hospitals were designed for mothers to go see a doctor, without needing the doctors to rush around home visits. The maternity was therefore set up to be as efficient as possible for the male doctor to do his job, even going to extreme measures of tying women onto their backs so they were able to see what they were doing easier. Key figures such as Florence Nightingale and Elizabeth Garrett Anderson, helped change the maternity ward design, to allow for disease control and a safer all- female birthing environment. By the 1950's, a planned approach to designing maternity wards had been established based on the existing maternity ward.

Has the maternity ward design changed to be designed for women and advancements in medical knowledge?

The surveys sent to maternity staff and mothers implied that the design had not changed since the 1950s planned approach, over seventy years later. This was clear to see within the home-comforts and decoration of the ward. Lighting was found to be too harsh for mothers, wanting softer, controllable lights, this was also something the 1974 New Yale survey highlighted. Natural lighting is a beneficial solution for both mothers and maternity staff, however, has not been fully implemented over the last 50 years. Family amenities are still being designed with the idea that partners and family wait in a waiting room, whereas mothers stated they would much prefer for there to be more space to allow for these people to stay in the room.

The survey also highlighted the lack of choice throughout the birthing process for the mother. Some of this choice could be given through the design of the ward providing space for amenities. The use of furniture, which on reflection was linked to the mothers birthing position, provided the options for alternative birthing methods, aside from lying on your back, which was the most popular birthing position used, and this was introduced when men took over maternity care.

A precedent study for a suggestion of maternity ward furniture that would be more comfortable than this, was Stiliyana Minkovska's design "Ultima Thule"(Hitti, 2020). The idea of the furniture drifted away from the standard bed design so mothers would be in more upright positions, using gravity to help. The furniture was soft, unconventional to the clinical hospital standards and provided a calming, playful atmosphere to the room. The furniture can be used in different positions and can be moved to best suite the user's needs, however, could not be easily transferred if the mother required medical intervention.

Due to the necessity of medical intervention within the maternity ward, certain requirements, such as this precedent, will not be suitable for all mothers. The availability of multiple options is necessary on the ward. This is also key for maternity staff, who require flexibility to not only ensure the mothers comfort but for their own ease of job. However, the design of the ward is still based on the idea that the ward should be designed for a time when male doctors wanted their jobs to be easier, and not for our modern-day equipment of birthing techniques.

Have updated designs in the last twenty years been successful?

The success of birthing centres was displayed in the survey results. This included space designed around modern-day practices, such as water births and electronic medical equipment. Designed in the last twenty years, the facilities are more modern, comfortable and provide more privacy. Private rooms and bathrooms are commonly found in birthing centres, which is prioritised by mothers. Maternity staff also had a more positive response to the birthing centre which could be linked to higher patient satisfaction. However, birthing centres are not used as much as they should be or as much as the mother chooses. The hospital maternity ward should look a birthing centre as an example of a successful birthing space, designed more recently, and apply these amenities to the Maternity ward, which is the place of 87% of births (Clancy, Boardman and Rees, 2024).

What are the steps going forward?

If I was to continue this research going forward, I would like to gain more participants for both surveys. The maternity staff I would like to reach national coverage, so more locations are covered, including a birth centre comparison survey separate from the hospital maternity ward. For mothers, I would like a more results between three and ten years. With this greater sample size, more trends if any, will be seen. I would also add the following questions to the survey:

- Did you have your own bathroom?
- Did this effect your experience of the maternity ward?
- Did you have a choice over the size of the ward, i.e. private room vs 4 bed ward?
- What size ward would you have chosen?
- Did you have a birthing plan?
- Was this stuck to?

I would also like to research the psychological factors of the maternity ward, and how this effect the birthing process. This is because birthing centres see higher satisfaction and ease of birth, and I want to explore if this is due to the success of design or due to the removal of the stress of medical intervention within the ward. This would help to conclude if the introduction of the forceps, along with other medical equipment, by male doctors, improved or in fact made worse the birthing experience. A further study on what medical equipment is needed in maternity could help decide additional design features.

This dissertation concluded that the maternity ward is not designed for women but instead is designed for an outdated practice where male doctors were still new to maternity and wanted their jobs to be more efficient. However the design of the maternity ward is also not ideal for medical function for the modern hospital today. Therefore, maternity ward design has surprisingly not changed much since the introduction of the specialist wards in the 1500's, which was made for male doctors of the time.

Bibliography

AHRnet (2024) Brydon, John McKean 1839 - 1901 | AHRnet. Available at: https://architecture.arthistoryresearch.net/architects/brydon-john-mckean (Accessed: 18 February 2025).

Aldis, G. (1954) Hospital Planning requirements. London: Pitman.

BBC (2014a) BBC - History - Elizabeth Garrett Anderson. Available at: https://www.bbc.co.uk/history/historic_figures/garrett_anderson_elizabeth.shtml (Accessed: 18 February 2025).

BBC (2014b) BBC - History - Historic Figures: Galen (c.130 AD - c.210 AD). Available at: https://www.bbc.co.uk/history/historic_figures/galen.shtml (Accessed: 1 February 2025).

BBC (2025) The role of the Church and monasteries - Developments in patient care – WJEC - GCSE History Revision - WJEC, BBC Bitesize. Available at: https://www.bbc.co.uk/bitesize/guides/z27nqhv/revision/1 (Accessed: 1 February 2025).

BBC (2015) 'Air-conditioning: Why might women feel temperature differently from men?', BBC News, 4 August. Available at: https://www.bbc.com/news/magazine-33760845 (Accessed: 2 May 2025).

Besant, W. and Hake, A.E. (1892) Suffering London: or, the hygiene, moral, social, and political relations of our voluntary hospitals to society: by A. Egmont Hake; with an introduction by Walter Besant. London: The Scientific Press, Ltd. Available at: https://link.gale.com/apps/doc/WTCNIA533021680/MOME?sid=gale_marc&xid=23265cb9&pg=1 (Accessed: 5 February 2025).

Clancy, G.E., Boardman, F.K. and Rees, S. (2024) 'A mixed-methods study of women's birthplace preferences and decisions in England', Women and Birth, 37(4), p. 101616. Available at: https://doi.org/10.1016/j.wombi.2024.101616.

DiFranco, J.T. and Curl, M. (2014) 'Healthy Birth Practice #5: Avoid Giving Birth on Your Back and Follow Your Body's Urge to Push', The Journal of Perinatal Education, 23(4), pp. 207–210. Available at: https://doi.org/10.1891/1058-1243.23.4.207.

Family-Centered Care (2025) Family Voices. Available at: https://familyvoices.org/familycenteredcare/ (Accessed: 30 April 2025).

Hitti, N. (2020) Stiliyana Minkovska reimagines hospital maternity wards as 'interstellar' spaces, Dezeen. Available at: https://www.dezeen.com/2020/04/14/stiliyana-minkovska-ultima-thule-maternity-design/ (Accessed: 29 April 2025).

How Florence Nightingale shaped London healthcare (2025) London Museum. Available at: https://www.londonmuseum.org.uk/collections/london-stories/how-florence-nightingale-shaped-london-healthcare/ (Accessed: 18 February 2025).

Jefford, R. (1967) Principles of hospital planning. London: Pitman Medical.

Kern, L. (2021) Feminist city: claiming space in a man-made world. London New York: Verso.

Merone, L. et al. (2022) 'Sex Inequalities in Medical Research: A Systematic Scoping Review of the Literature', Women's Health Reports, 3(1), pp. 49–59. Available at: https://doi.org/10.1089/whr.2021.0083.

McDonald, L. (2006) Florence Nightingale on Women, Medicine, Midwifery and Prostitution: Collected Works of Florence Nightingale, Volume 8. Waterloo: Wilfrid Laurier University Press (Collected Works of Florence Nightingale, v. 8).

NHS (2020) Forceps or vacuum delivery, nhs.uk. Available at: https://www.nhs.uk/pregnancy/labour-and-birth/what-happens/forceps-or-vacuum-delivery/ (Accessed: 25 April 2025).

Parliment (2025) House of Commons - Health - Written Evidence. Available at: https://publications.parliament.uk/pa/cm200203/cmselect/cmhealth/796/796we14.htm (Accessed: 25 April 2025).

Richardson, H., Goodall, I.H., and Royal Commission on Historical Monuments (England) (eds) (1998) English hospitals 1660 - 1948: a survey of their architecture and design. Swindon: Royal Commission on the Historical Monuments of England.

Royal College London (2010) 'Guidance on safe nurse staffing levels in the UK'. Policy Unit.
Rudolf Klein, T.O. (1900) New Politics of the NHS, The. Milton, UNITED KINGDOM: Taylor & Francis Group. Available at: http://ebookcentral.proquest.com/lib/manchester/detail.action?docID=5268346 (Accessed: 5 February 2025).

Ryan, T. (1885) The history of Queen Charlotte's Lying-in Hospital : from its foundation in 1752 to the present time, with an account of its objects and present state / by Thomas Ryan., Wellcome Collection. Available at: https://wellcomecollection.org/works/efy9gme9/items (Accessed: 18 February 2025).

Smith, W.D. (2025) Hippocrates | Biography, Works, & Facts | Britannica. Available at: https://www.britannica.com/biography/Hippocrates (Accessed: 1 February 2025).
The History of Childbirth (2024) Birth Injury Help Center. Available at: https://www.birthinjuryhelpcenter.org/birth-injuries/delivery-complications/childbirth-history/ (Accessed: 5 February 2025).

Thompson, J.D. and Goldin, G. (1975) The hospital: a social and architectural history. New Haven: Yale Univ. Press.

UCL (2018) Our History, EGA Institute for Women's Health. Available at: https://www.ucl.ac.uk/womens-health/about-institute/our-history (Accessed: 18 February 2025).

UCL (2025) The Birthing Centre, University College London Hospitals NHS Foundation Trust. Available at: https://www.uclh.nhs.uk/our-services/find-service/womens-health-1/maternity-services/giving-birth/birthing-centre (Accessed: 25 April 2025).

University of Glasgow (2025) 'A Brief History Of Medicine', FutureLearn. Available at: https://www.futurelearn.com/info/blog (Accessed: 1 February 2025).

Victorian web (2016) Elizabeth Garrett Anderson Hospital Building. Available at: https://victorianweb.org/art/architecture/hospitals/2.html (Accessed: 18 February 2025).

Weisman, L.K. (1992) Discrimination by design: a feminist critique of the man-made environment. Urbana Chicago Springfield: University of Illinois Press.

Wright, J. (2022) 'Public health women doctors in England: from backwater to strategic roles in 20 years', Journal of Public Health, 44(Supplement_1), pp. i73–i84. Available at: https://doi.org/10.1093/pubmed/fdac107.

'Your birth options.pdf' (2024). Available at: https://www.uhcw.nhs.uk/download/clientfiles/files/Patient%20Information%20Leaflets/Women%20and%20Children_s/Maternity/Your%20birth%20options.pdf (Accessed: 25 April 2025).

Image References

1. St Thomas' Hopsital, Vaxhaul History, 2012 available at https://vauxhallhistory.org/st-thomass-hospital/
2. St Bartholomews Hospital c.1740 available at https://www.exploreyourarchive.org/spotlight-2/exhibition-life-and-death-in-the-archives-st-bartholomews-hospital-1123-2023/
3. Florence Nightingale, c.1870, perry pictures, 1910 available at https://www.britannica.com/biography/Florence-Nightingale
4. Nightingale in Crimean War Hospital c.1855, Getty 2022 available at https://www.britannica.com/biography/Florence-Nightingale
5. Pavillion plan design at St Thomas, Thompson, J.D. and Goldin, G. (1975) The hospital: a social and architectural history. New Haven: Yale Univ. Press.
6. Timeline of change, Holden L 2025
7. The Ward Plans, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
8. Windows in the ward, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
9. Solariums, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
10. Clinical and sterilization room, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
11. Ward kitchen circulation, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
12. Ancient Egypt squatting birth, Elsevier, 2005 available at https://egypt-museum.com/plaque-of-a-woman-giving-birth/
13. New city of London lying in ward, Richardson, H., Goodall, I.H., and Royal Commission on Historical Monuments (England) (eds) (1998) English hospitals 1660 - 1948: a survey of their architecture and design. Swindon: Royal Commission on the Historical Monuments of England.
14. Queen Charlottes Maternity Hospital c.1905, Evans, 2025 available at https://www.prints-online.com/queen-charlottes-hospital-marylebone-road-14253482.html
15. Liverpool Lying in hospital 1884, Richardson, H., Goodall, I.H., and Royal Commission on Historical Monuments (England) (eds) (1998) English hospitals 1660 - 1948: a survey of their architecture and design. Swindon: Royal Commission on the Historical Monuments of England.
16. Elizabeth Garret Anderson, available at https://www.notablebiographies.com/A-An/Anderson-Elizabeth-Garrett.html
17. The new hospital for women 1890 available at https://wellcomecollection.org/works/m5yafu22/images?id=xtr28q5h
18. Inside the hospital, Richardson, H., Goodall, I.H., and Royal Commission on Historical Monuments (England) (eds) (1998) English hospitals 1660 - 1948: a survey of their architecture and design. Swindon: Royal Commission on the Historical Monuments of England.
19. Circulation of Ward, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.
20. Patients' circulation, Aldis, G. (1954) Hospital Planning requirements. London: Pitman.

Appendix A: What is successful in the current maternity ward design? Maternity staff

- Wide corridors. Adjustable beds. Yoga balls in antenatal and delivery.
- Number of private rooms
- Our birth centre is spacious, considering lighting and furniture. We also have other options to use in the more clinical rooms, such as birth balls and lights we can bring in (battery lights, projectors etc)
- Private rooms
- Birthing Centre
- All rooms surround the midwives station
- Offer some options other than the bed, adjustable bed, low lights
- Nil
- Space
- Some private rooms, good access to different birthing spaces.
- Centralise office on postnatal ward, toilets available it both corridors.
- mixture of rooms and bays
- Medicalised, safety and space in emergencies
- Movable beds
- lots of big spacious rooms
- nothing
- Calmer environment and rooms
- A spacious room that is modern and contains up to date equipment
- new delivery beds with more functions
- Good beds, some spacious rooms
- Nothing
- Birthing pools in 5 of our rooms, birthing stools, mats and balls all available
- separate birthing centre, low risk rooms, pool availability
- Some beds near windows
- private rooms with bathrooms
- the birth centre is a fantastic facility
- 1 bathroom per bay ie only 4 people using it
- Large rooms
- I have recently moved to St Mary's from another hospital so cannot comment. I would say that a spacious, light filled environment is ideal, possibly a central area for staff/ computers/ phones etc with bays/ rooms set off from it. The store/utility etc rooms need to 'flow' / be easily accessible. We spend a lot of time running around looking for equipment, drugs etc etc (wasted time!)
- Some single ensuite rooms
- The new visiting times allowing birth partners to stay over night

Appendix B: What improvements would you make to the design of the maternity ward?
Maternity Staff

- we are always told it's too cold yet there's nothing we can do about it, nor are mothers allowed personal heaters. Warmer colours and home-like decor. Pull down beds for partners in bays and every room - currently only some private rooms have pull down beds. Pain relief equipment like heat pads or ice packs. Pillows that don't ruin shape after a few uses.
- More use of mood lighting, other equipment such as things to make birth more upright and forwards, availability of aromatherapy, having less lighting in the bathrooms, the rooms are sometimes too cool, and can't be adjusted by the woman. There should be availability of music to be played (not through an old CD player). We should have telemetry fetal heart monitoring, so the women can be monitored wirelessly. This will allow more women to use birthing pools, even if they need to have continuous monitoring.
- More space around beds for cots, more side rooms, all beds to have own Obs machines
- Make labour ward decoration, equipment & design equivalent to the luxury of the Birth Centre (obviously with small changes to accommodate the increased intervention - drip stands, CT's, etc). Just because a woman is deemed "high-risk" in pregnancy, doesn't mean she wouldn't appreciate the same home comforts, space, mood lighting, peaceful environment, etc, as low-risk women. They are still laboring, and may even need the encouragement more, given they have ailments making them high-risk which is likely to be stressing them out. Access to these things should not be limited to women lucky enough to have no pregnancy complications.
- Also, the wards (antenatal & postnatal) have very limited natural light where I work, and are extremely cramped. This is not only unsafe for staff (I.e in emergencies, moving equipment quickly, etc) but can make an unenjoyable environment for our women which is the opposite of what we want! Calm, relaxing environments assist in progress in IOL, patient experience, labour & delivery outcomes, etc!
- Not atlot at all!
- Baths for pain relief, bigger rooms for appropriate equipment/technology and dignity, less clinical although this is a hospital setting it is also a normal physiological process. All maternity on one floor of the hospital (safer).
- Wall art or nature pictures, mood lighting, room to mobilise with birth options other than the bed
- Larger spaces, with access to natural light and comfortable temperatures. Space for birth partners to also rest e.g. reclining chairs. Access to community space and outdoor space if long admission.
- More soothing modern equipment
- More private bedrooms, comfortable chairs i.e recliners
- more beds available, more homely and bigger day room for patients / visitors
- Patient led environment choices
- space, less clinical looking, more communal spaces for mothers and families
- More private rooms, more telemetry machines
- windows with natural light
- bays are not big enough for mum and baby, dark curtains make the space feel closed. light curtains and colours should be used, there should be a clinical room where intermate examinations can be conducted as the bays do not offer privacy. communal space for the woman is also needed like a sitting room or dining room this would be a good space to use for discharge talks and parent education.
- make the birthing rooms more homely
- multipurpose room for high and low risk women
- larger postnatal bays to make room for bed and a cot and to assist mobilising

- Knock it down and start from scratch. Each room would be spacious and light with individual controlled air con. There would be cupboards for patient belongings and space for refreshments.
- More single rooms for women. Bigger bed space in the bays. Bigger doorways to get beds through. Modern bathrooms with ventilation. Temperature control. Office space for management level staff. Fridges for patient food. Facilities for storing artificial milk and making up artificial feeds. Breakrooms without call bells in them. Properly equipped and separate staff kitchen.
- Better facilities for provision of care for women in the latent phase of labour. Rebuild of the whole maternity unit is a pipe dream but would be lovely to facilitate more side rooms and family friendly facilities.
- postnatal ward needs better family centred space availability for support partners to stay
- More space
- Bigger bathrooms, spaces for families, partner facilities reclining chairs so they can rest, better lighting in to rooms to create calm, more home from home decor, access to more than 1 pool, bigger rooms so the bed does not become the focus of the room.
- add birth support ropes
- more space around the bed. more comfortable chairs. more side rooms
- Better decor and furnishings, better access to other equipment such as mats, balls, coaches, comfortable chairs
- See above. Plus large bays where we can see the women('patients') and they can see me/ us.
- Women like to close the curtains around themselves for privacy, especially when there are other people's visitors present. This is not helpful for the midwife as we need to see what is going on, especially on the postnatal ward (sometime we have 8 mums & 8 babies so our 1:1 time is v limited) .
- Lots more space and privacy
- Enough space & privacy for partners to stay

Appendix C: What is successful in the current maternity ward design? Mothers Survey

- I had access to a birthing ball, was quickly transferred to a private room with a spare bed and en suite with a large shower. It felt very private but doctors quickly accessed when they needed to
- Based on the birthing suite you had your own private room with access to birthing probs, lighting/ temp control, birthing pool! 1:1 nurse who was with you the whole time. When transferred to the main ward, the amount of medics on standby to intervene when complications happened. Within seconds of delivery 10 doctors/ professionals were in the room making sure my daughter was ok as was I.
- It was relaxing for the most part.
- I didn't see much of it due to the circumstances
- Private space for giving birth, calm nature images and sensory lamps
- Comfortable and adjustable beds were good. The birthing pool room was spacious and relaxing with mood lighting and music.
- Adjustable beds and incredible support from staff
- Spacious delivery rooms that would have allowed for movement if I had been able.
- Nothing from what I can remember.
- Large private rooms
- I'm not sure I've only seen very old fashioned hospital units
- Spacious airy private. (soundproofing) many women were terrified by the screams of neighbouring women next door. Curtains across doors or angled beds so to don't expose women with their legs apart when opening a door. Soft furnishings for family.
- It's over 20 years ago so probably my experience is not relevant to maternity wards today
- Hard to remember - so long ago
- New comfortable bed, private bathroom
- I'm not sure as it was a long time ago
- I don't know
- The birthing centre is private ensuite rooms which is great. The antenatal and postnatal wards have bays of beds which are incredibly difficult environments to be comfortable in.
- Privacy

Appendix D: What improvements would you make to the design of the maternity ward? Mothers Survey

- I took electric tealights but the lighting was really harsh and there was a fan in the room but it was very warm (for me anyway!)
- Slightly larger rooms to allow more movement and access to props on the main ward instead of just available in the suite.
- To maybe update them to not look so outdated. I spent the whole of my labour staring at a wall of a beach which to me was not relaxing, as I don't really like the beach. It seemed strange to assume that every labouring woman wants to be on the beach when she's pushing out a baby! I would have liked to have seen more calming colours and tones.
- More beds!
- The antenatal/ postnatal wards - thin curtains separating so you hear everyone else snoring, which makes rest very difficult
- There was a lack of privacy once out of the birthing pool room, this means you can hear all the other patients and babies crying and it's hard to relax or get sleep. The general design of the maternity wards are very clinical and not comforting, it would be nice if they were decorated to be more homely. Also connections to nature would be nice and relaxing.
- More natural light and greater privacy/sound separation between beds
- Bigger spaces/private rooms for postnatal women. Would help with soundproofing of voices/alarm bells. Proper sleeping space for companions to stay 24/7 to provide help.
- I would use softer lighting to make an expectant Mum feel more relaxed. Decor- softer colours/more comfortable welcoming furniture to create a softer look. Less corridors and more small inner courtyards/natural light /atriums. Tea/coffee making area for partners/family accompanying Mum to be. Quiet area where you can walk up and down if need be as opposed to having to walk up and down corridor outside birthing rooms listening to Mums giving birth. Improved bathrooms. Updated baths if they haven't been changed. Layout- softer arranged bed layout in the community ward if stay is required, as opposed to a row of beds opposite a row of beds.
- Making the rooms look more homely and relaxing instead of clinical
- Less clinical feel. More privacy. Bigger room sizes to allow families to visit or support labouring women.
- Sorry see answer above. Less boxy rooms, more space softer lighting options.
- Please see answer above
- Can't remember
- At time I was there, I didn't think anything needed changing.
- A bathroom in the waiting area that leads straight into a place to give birth if required. I was sick on the toilet floor on arrival while nearly having the baby sitting on the toilet. Afterwards, I had to go back to the receptionist in the public space and tell her about the sick, in earshot of waiting room. A clean and functioning shower connected to the room, I gave birth in. I had to walk across a public corridor after giving birth. The shower was so blocked, I had to stand in my own/dirty water - a clean and available en suite. Giving birth noisily is embarrassing when you know that people, incl visitors to the ward will be able to hear you. Birthing spaces away from the waiting room and reception! After giving birth I would have preferred a private room to rest in until I went home the next day. You can't sleep in a 4-bed ward. Nurses put the lights on every time something us up, all night. Giving birth is extremely tiring and emotional. Privacy and rest are essential. Privacy was the most important bit for me. Nobody seemed to care about privacy.
- More private rooms available.
- Less clinical

Appendix E: What was the reason for your choice to give birth here? (If you were transferred, answer for you initial choice i.e. you chose home birth but were transferred to hospital, answer for home births) Mothers Survey

- Chose a birth centre as I wanted a natural birth with no pain relief, it was the calmest environment and supported my plans to use hypnobirthing
- Birthing centre allowed me to be on lower risk supervision and enjoy things like water birthing pool, relaxing music, darkened room, little technology around me, to keep me relaxed. Due to complications I was taken to the main ward to deliver my daughter.
- I was high risk so had no choice but to be at hospital.
- Local hospital, baby was born under cat1 emergency conditions
- I decided on an induction at full term due to repeated episodes of reduced movement so was required to deliver on Labour ward rather than the birthing centre as I had originally planned.
- Safety in birth should anything go wrong
- Having the comfort of being around medical professionals if anything went wrong and also easier access to pain relief if needed
- Elective C-Section can only be performed on the maternity ward and would have chosen to give birth on the maternity ward anyway for access to full range of pain relief and emergency intervention
- Felt more reassured to be within a hospital environment in case anything went wrong.
- I wanted to give birth in a hospital. I chose my local hospital as it was connected to my GP surgery and community midwives.
- I wanted to be in hospital in case there were any complications
- It was the best option for me as it was my first child and I have some health conditions that needed to be closely monitored throughout my delivery and after care.
- Safety. The hospital was a teaching hospital and had latest knowledge & skills on hand, should anything go wrong.
- Medical advice
- hospital is too clinical. more support from midwifes at home.
- I was a midwife and I didn't want to give birth in a hospital setting
- I handpicked my midwives and felt that maternity experience was not about a ball or a bed style and that nothing can replace the comfort of being at home with people you know.
- Chose home but had to be hospital due to premature birth
- Planned home birth but had to go to hospital because of low iron level and cord caught under arm pit.
- I had no choice. I wanted a home birth.
- Birthing centre- I worked in the maternity unit I birthed in.